

TEXAS INSTRUMENTS

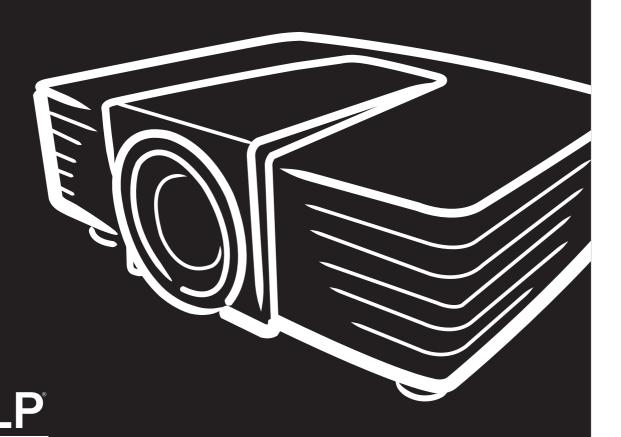
DX3350 DW3320 DH3331 DH3330 DU3340 DU3341 Series

User Manual 用戶手冊 用户手册 Manual del usuario Manuel de l'utilisateur Benutzerhandbuch 사용자 설명서 Руководство пользователя Gebruikershandleiding Instrukcja obsługi Uživatelská příručka Εγχειρίδιο χρήσης Kullanım Kılavuzu Manuale d'uso Handbok Brugerveiledning Brukerveiledning

Felhasználói kézikönyv

مدختسملا ليلد Manual do Usuário

Kyttohje



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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

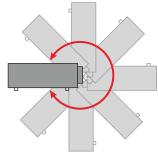
- > Do not open the unit case. Aside from the projection lamp, there are no user-serviceable parts in the unit. For servicing, contact qualified service personnel.
- > Follow all warnings and cautions in this manual and on the unit case.
- > The projection lamp is extremely bright by design. To avoid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

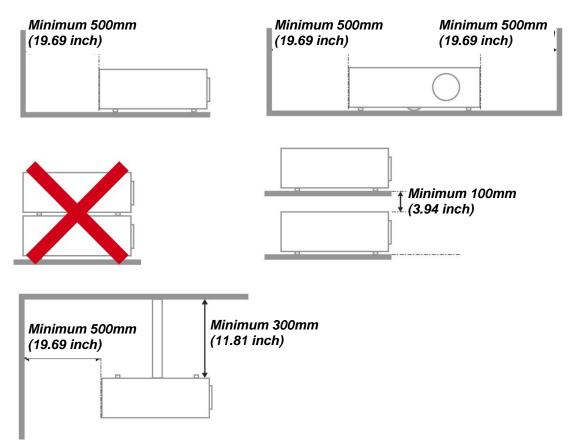
> **Do not tilt the projector to the left or right**, otherwise lamp life could decrease dramatically, and may lead to other **unpredictable damages**.



There is no limit on the tilt angle upward or downward.



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 with 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 (>1 Meter) 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 55 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 59.
- 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 78.

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 <a href="https://www.eiae.com/www.ei

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

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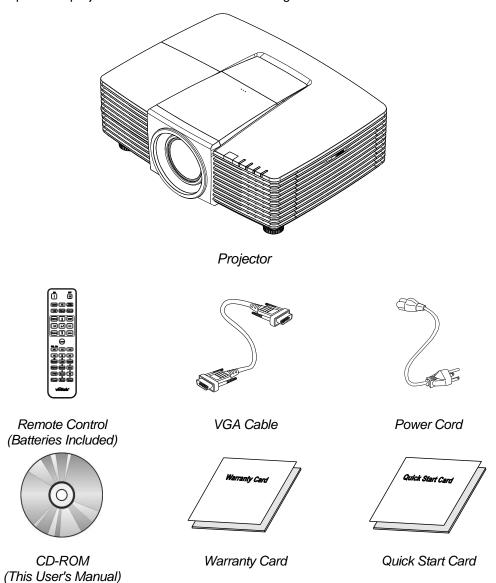
DLP Projector—User's Manual

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GETTING STARTED

Packing Checklist

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



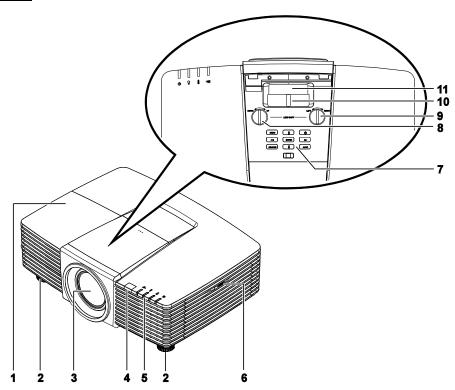
Contact your dealer immediately if any items are missing, appear damaged, or if the unit does not work. It is recommend that you keep the original packing material should you ever need to return the equipment for warranty service.



Avoid using the projector in dusty environments.

Views of Projector Parts

Front-right View

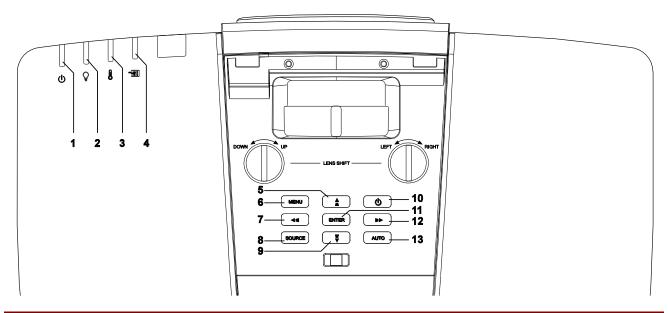


Ітем	LABEL	DESCRIPTION	SEE PAGE:
1.	Lamp Cover	Remove cover to replace lamp.	55
2.	Tilt Adjuster	Rotate adjuster lever to adjust angle position.	14
3.	Lens	Projection Lens.	
4.	IR Receiver	Receives IR signal from remote control.	7
5.	LEDs	Displays the projector status.	3
6.	Vent	Cool air intake.	60
7.	Function Keys	On-Screen Display (OSD) buttons.	3
8.	Vertical Lens Shift	Adjusts the image position vertically.	18
9.	Horizontal Lens Shift	Adjusts the image position horizontally.	20
10.	Zoom Ring	Enlarges the projected image.	
11.	Focus Ring	Focuses the projected image.	



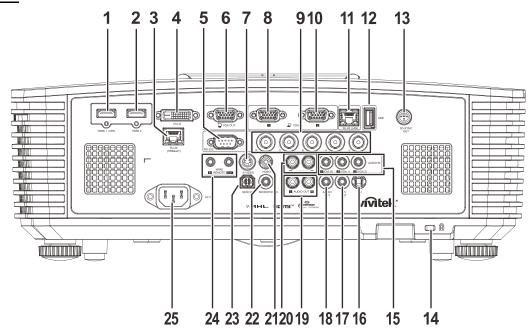
Ventilation openings on the projector allow for good air circulation, which keeps the projector lamp cool. Do not obstruct any of the ventilation openings.

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



ITEM	LABEL	DESCRIPTION	SEE PAGE:
1.	Power LED	Display the power on/off sequence status.	
2.	Lamp LED	Display the lamp status.	65
3.	Temp LED	Display the thermal status.	65
4.	Filter LED	Display the filter replacing warning message.	65
5.		Navigates and changes settings in the OSD. Quick Menu – For Vertical Keystone.	23
6.	MENU	Opens and exits OSD menus.	23
7.	4	Navigates and changes settings in the OSD. Quick Menu – For Horizontal Keystone.	
8.	SOURCE	Enter the Source menu.	
9.	*	Navigates and changes settings in the OSD. Quick Menu – For Vertical Keystone.	
10.	Power	Turn the projector on or off.	
11.	ENTER	Enter or confirm highlighted OSD menu item.	
12.	••	Navigates and changes settings in the OSD. Quick Menu – For Horizontal Keystone.	
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 DH3331/DU3341)	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 Vo	GA1 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 enab	oled 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.	Kensington Security Slot	Secures to permanent object with a Kensington Lock system. 63		
15.	AUDIO IN	Connect an AUDIO cable from the input device.		

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

Note:

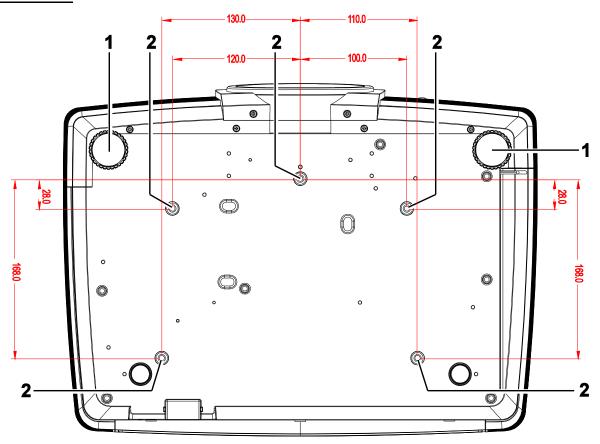
- To use this feature, you must plug in the connector before turn on/off the projector.
- Screen controllers are supplied and supported by screen manufacturers.
- Do not use this jack for anything other than intended use.



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.	

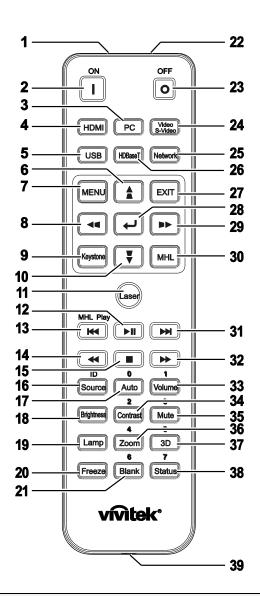
Note:

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 8 mm (0.31 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.

İTEM	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 HDMI1/HDMI 2/DVI source selection (toggle)).	
5.	USB	Displays the USB source selection.		
6.		Navigates and changes settings in the OSD. Quick Menu – For Vertical Keystone.	23	
7.	MENU	Opens the OSD.	23	
8.	◄ ■	Navigates and changes settings in the OSD. Quick Menu – For Horizontal Keystone.	23	
9.	Keystone	Opens the Keystone menu.		
10.	*	Navigates and changes settings in the OSD. Quick Menu – For Vertical Keystone.	23	
11.	Laser	Press to operate the on-screen pointer. DO NOT POINT I	N EYES.	
12.	▶II	Play or pause video/music for MHL.		
13.	 	Reverse in set increments for MHL.		
14.	44	Play the previous item on the programming list for MHL.		
15.		Stop video/music playing for MHL.		
16.	Source/ID	Alternate input source. Combo key function for Remote Control customer code settings (Press ID button + Number for 3 seconds).	23	
17.	Auto/0	Auto adjustment for frequency, phase, and position. Number for Remote ID setting used.	23	
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 (Available in DH3331/DU3341)	Displays the HDBaseT source selection.		
27.	EXIT	Return to last OSD page.		
28.	←	Enters and confirms settings in the OSD. 23		
29.	•	Navigates and changes settings in the OSD. Quick Menu – For Horizontal Keystone.		
30.	MHL	Enable the Mobile High-Definition Link technology feature for smart devices.		
31.	>>	Forward in set increments for MHL.		

Ітем	LABEL	DESCRIPTION SEE PAGE			
32.	>>	Play the following item on the programming list for MHL.			
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.			
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 41.

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.

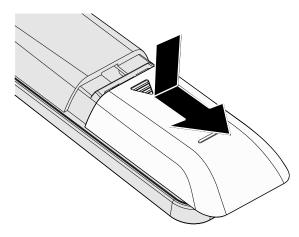
Projector and Remote Control Buttons

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.

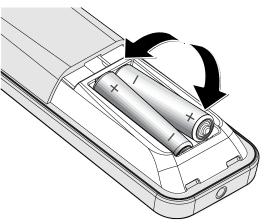
SETUP AND OPERATION

Inserting the Remote Control Batteries

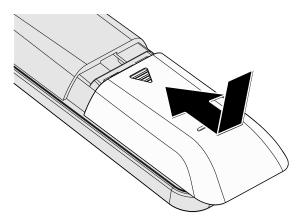
1. Remove the battery compartment cover by sliding the cover in the direction of the arrow.



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



3. Replace the cover.



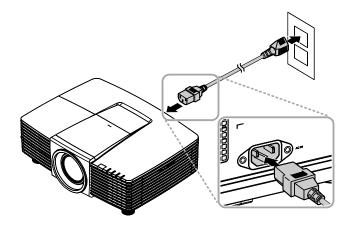


Caution:

- 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.

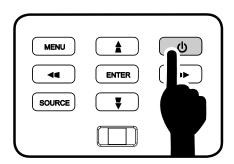


- **2.** Turn on the lamp by pressing "button on the top of the projector or
 - "I" on the remote control.

 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 24)

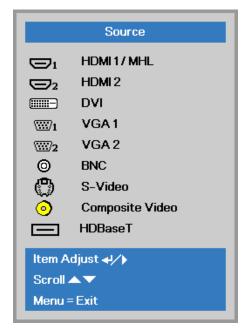
See Setting an Access Password (Security Lock) on page 14 if security lock is enabled.





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: 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
- S-Video: Super video (Y/C separated)
- Composite Video: Traditional composite video
- HDBaseT: Digital Video trough the HDBaseT transmitter (Available in DH3331/DU3341)

Note: Using a single HDBaseT CAT5e cable, the projector supports an HDBaseT connection distances to 100m/328ft.

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.

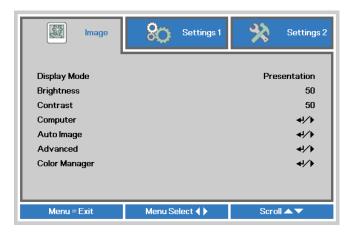
Setting an Access Password (Security Lock)

You can use the four (arrow) buttons to set a password and prevent unauthorized use of the projector. When enabled, the password must be entered after you power on the projector. (See *Navigating the OSD* on page 23 and *Setting the OSD Language* on page 24 for help on using OSD menus.)

Important:

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

1. Press the **MENU** button to open the OSD menu.



Press the cursor < ▶ button to move to the Settings 1 menu, press the cursor
▲ ▼ button to select Advanced 1.



- 3. Press (Enter) / to enter the Advanced 1 sub menu. Press the cursor ▼ button to select Security Lock.
- Press the cursor ◀► button to enter and enable or disable security lock function.

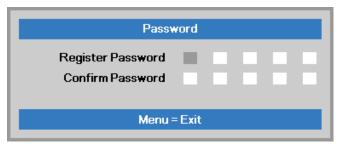
A password dialog box automatically appears.



You can use the cursor buttons
▲▼◆►

either on keypad or IR remote control for password entry. You can use any combination including the same arrow five times, but not less than five.

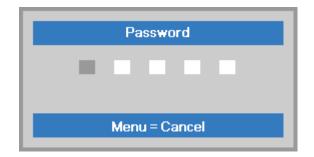
Press the cursor buttons in any order to set the password. Push the **MENU** button to exit the dialog box.





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

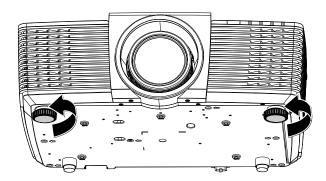
The service center will validate the owner and help reset the password.



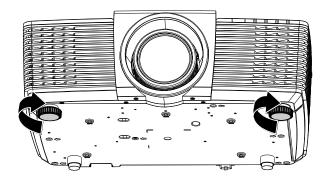
Adjusting the Projector Level

Take note of the following when setting up the projector:

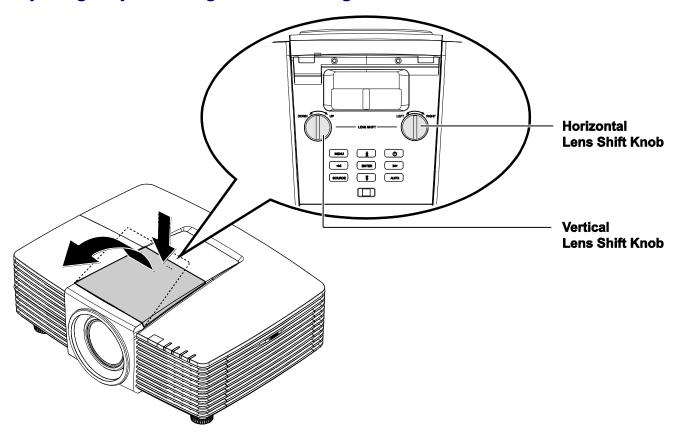
- The projector table or stand should be level and sturdy.
- Position the projector so that it is perpendicular to the screen.
- Ensure the cables are in a safe location. You could trip over them.
- 1 To raise the level of the projector, twist the adjusters counter clockwise.



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.

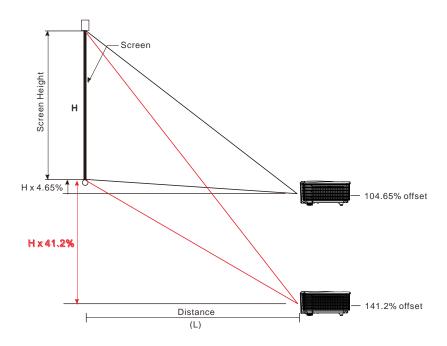
Note:

Do not rotate lens shift knob further under click sound and lightly press the knob to rotate back.

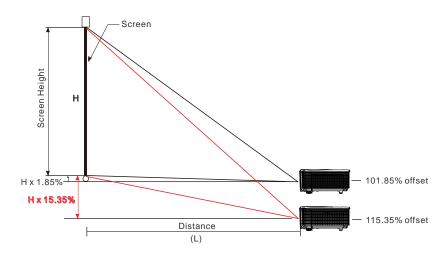
Adjusting the vertical image position

The vertical image height can be adjusted between 141.2% and 104.65% for WXGA, 115.35% and 101.85% for XGA, 146.7% and 104.5% for 1080P, 132% and 99.1% for WUXGA 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.

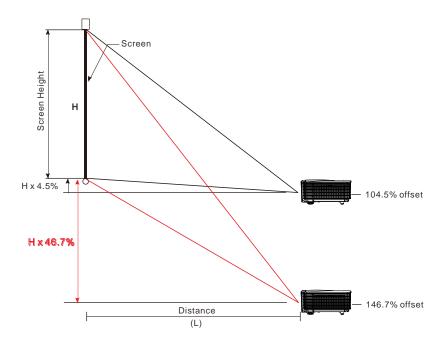
WXGA



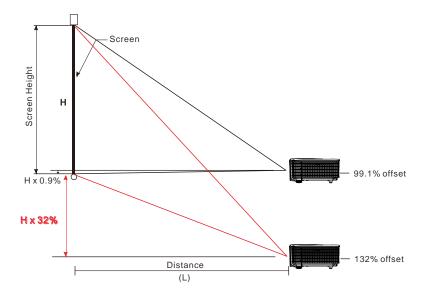
XGA



1080P

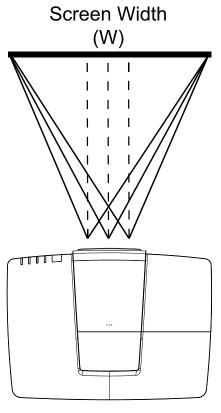


WUXGA



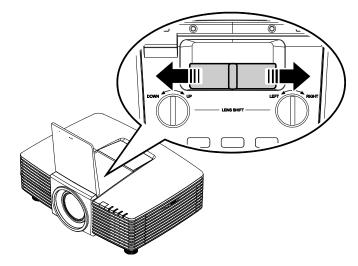
Adjusting the horizontal image position

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, 10.3% for 1080P, 10.3% for WUXGA 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.

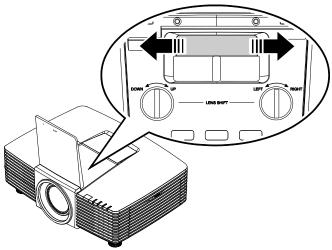


Adjusting the Zoom, Focus and Keystone

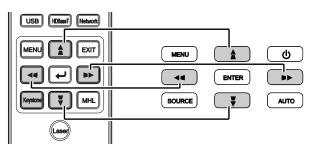
1 Use the **Image-zoom** control (on the projector only) to resize the projected image and screen size.



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.

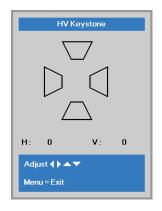


Remote control and OSD panel

4. The keystone control appears on the display.

Press for V Keystone correcting image.

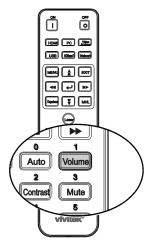
Press / for H Keystone correcting image.



Adjusting the Volume

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

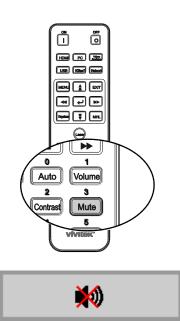
The volume control appears on the display.



8■ Press the **I** / **I** buttons on the keypad to adjust **Volume +/-**.



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



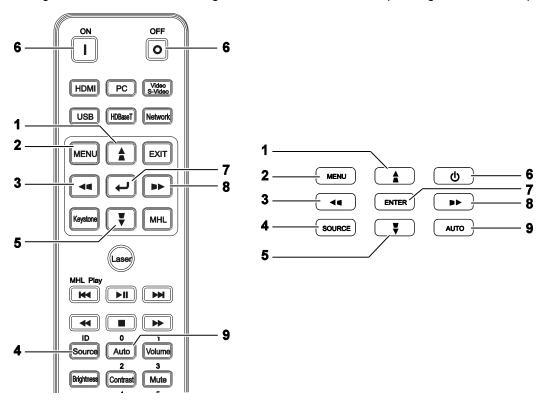
ON-SCREEN DISPLAY (OSD) MENU SETTINGS

OSD Menu Controls

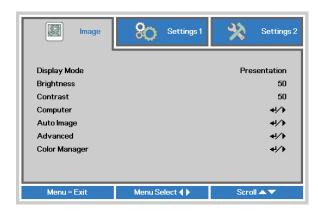
The projector has an OSD that lets you make image adjustments and change various settings.

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 three 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:

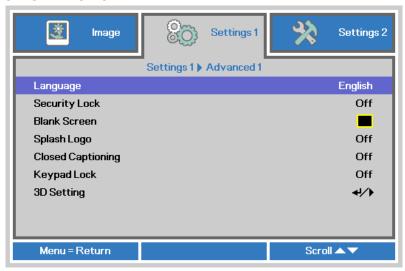
Depending on the video source, not all items in the OSD are available. For example, the **Horizontal/Vertical Position** items in the **Computer** menu can only be modified when connected to a PC. Items that are not available cannot be accessed and are grayed out.

Setting the OSD Language

Set the OSD language to your preference before continuing.

Press the MENU button. Press the cursor ◀► button to navigate to Settings 1. Press the cursor ▲▼ button to move to the Advanced 1 menu.





- 3. Press the cursor button until the language you want is highlighted.
- 4. Press the **MENU** button four times to close the OSD.

OSD Menu Overview

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

Main				0.41
Menu	Sub Menu			Settings
Image	Display Mode	_		Presentation, Bright, Game, Movie, Vivid, TV, sRGB, DICOM SIM, User
	Brightness			0~100
	Contrast			0~100
	Computer	Horizontal Position		-5~5 (depend on Autolock)
		Vertical Position		-5~5 (depend on Autolock)
		Frequency		0~31
		Tracking		-5~5
		Auto Sync		On, Off
	Auto Image			
	Advanced	Brilliant Color		0~10
		Sharpness		0~31
		Gamma		1.8, 2.0, 2.2, 2.4, B&W, Linear
		Color Temperature		Warm, Normal, Cold
		Video AGC		Off, On
		Video Saturation		0~100
		Video Tint		0~100
		White Balance	R Gain	0~200
			G Gain	0~200
			B Gain	0~200
			R Offset	-100~100
			G Offset	-100~100
			B Offset	-100~100
	Color Manager	Red	Hue, Saturation, Gain	0~100
		Green	Hue, Saturation, Gain	0~100
		Blue	Hue, Saturation, Gain	0~100
		Cyan	Hue, Saturation, Gain	0~100
		Magenta	Hue, Saturation, Gain	0~100
		Yellow	Hue, Saturation, Gain	0~100
		^L White	Red, Green, Blue	0~100

Main				
Menu	Sub Menu			Settings
Settings 1	Source	Source		reference Input Source Select (IR/Keypad)
	Projection			Normal, Rear, Ceiling, Rear+Ceiling
	Aspect Ratio			Fill, 4:3, 16:9, Letter Box, Native, 2.35:1
	Keystone			H: -25 ~ +25 V: -30 ~ +30
	Digital Zoom			-10~10
	Audio	Volume		0~10
		Mute		Off, On
		Out		Off, Mini, RCA
	Advanced 1	Language		English, Français, Deutsch, Español, Português, 簡体中文, 繁體中文, Italiano, Norsk, Svenska, Nederlands, Русский, Polski, Suomi, Еλληνικά, 한국어, Magyar, Čeština, ルマルト Türkçe, Việt, 日本語, ไทย ,
		Coourity Look		עברית ,فارسى, Dansk, Fran. Can. Off, On
		Security Lock		<u> </u>
		Blank Screen		Blank, Red, Green, Blue, White
		Splash Logo		Std., Black, Blue
		Closed Captioning		Off, On
		KeypadLock		Off, On
		3D Setting	┌3D	Off, DLP-Link, IR
			3D Sync Invert	Off, On
			3D Format	Frame Sequential, Top/Bottom, Side-By-Side, Frame Packing (3D Frame Packing HDMI source only)
	Advanced 2	Test Pattern		None, Grid, White, Red, Green, Blue, Black
		H Image Shift		-50~50
		V Image Shift		-50~50
	4 Corner			Left-Top, Right-Top, Right-Bottom, Left-Bottom

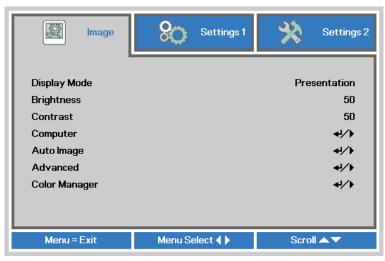
Main Menu	Sub Menu			Settings
Settings 2	Auto Source			Off, On
Ü	No Signal Power Off			0~180
	Auto Power On			Off, On
	Lamp Mode			ECO , Normal, Dynamic ECO
	Reset All			
	Status	Active Source		
		Video Information		
		Lamp Hours(ECO, Norma Dynamic ECO)	l,	
		Software Version		
		Remote ID		
		Serial Number		
		_Air Filter Hour		
	Advanced 1	Menu Position		Center, Down, Up, Left, Right
		Translucent Menu		0%, 25%, 50%, 75%, 100%
		Low Power Mode		Off, On, On By Lan
		Fan Speed		Normal, High
		Lamp Hour Reset		
		Projector ID		0-98
		Remote ID		Default, 1, 2, 3, 4, 5, 6, 7
		Network	Network State	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
			Gateway	0~255, 0~255, 0~255. 0~255
			DNS	0~255, 0~255, 0~255. 0~255
			Apply	Ok / Cancel
	Advanced 2	Sleep Timer		0~600
		Source Filter	HDMI1/MHL	Disable, Enable
			HDMI2	Disable, Enable
			DVI	Disable, Enable
			VGA1	Disable, Enable
			VGA2	Disable, Enable
			BNC	Disable, Enable
			S-Video	Disable, Enable
			Composite Video	Disable, Enable
			HDBaseT	Disable, Enable
		Air Filter Timer Reset		OK / Cancel

Image Menu



All of display mode parameters when changed will be saved to user mode.

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



Ітем	DESCRIPTION
Display Mode	Press the cursor ◀▶ button to enter and set the Display Mode.
Brightness	Press the cursor ◀▶ button to enter and adjust the display brightness.
Contrast	Press the cursor ◀▶ button to enter and adjust the display contrast.
Computer	Press
Auto Image	Press
Advanced	Press
Color Manager	Press

Computer Menu

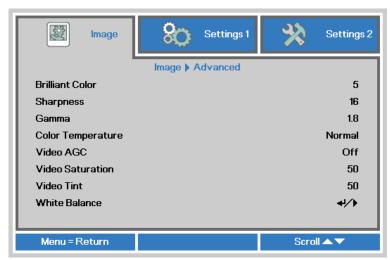
Press the **MENU** button to open the **OSD** menu. Press $\blacktriangleleft \triangleright$ to move to the **Image** menu. Press $\blacktriangle \blacktriangledown$ to move to the **Computer** menu and then press **Enter** or \triangleright . Press $\blacktriangle \blacktriangledown$ to move up and down in the **Computer** menu.



Ітем	DESCRIPTION
Horizontal Position	Press the cursor ◀▶ button to enter and adjust the display position to left or right.
Vertical Position	Press the cursor ◀▶ button to enter and adjust the display position to up or down.
Frequency	Press the cursor ◀▶ button to enter and adjust the A/D sampling clock.
Tracking	Press the cursor ◀▶ button to enter and adjust the A/D sampling dot.
Auto Sync	Press the cursor ◀▶ button to enter and adjust the Auto Sync Position to On or Off.

Advanced Feature

Press the **Menu** button to open the **OSD** menu. Press $\blacktriangleleft \triangleright$ to move to the **Image** menu. Press $\blacktriangledown \blacktriangle$ to move to the **Advanced** menu and then press **Enter** or \blacktriangleright . Press $\blacktriangledown \blacktriangle$ to move up and down in the **Advanced** menu.



Ітем	DESCRIPTION
Brilliant Color	Press the cursor ◀▶ button to enter and adjust the Brilliant Color value.
Sharpness	Press the cursor ◀▶ button to enter and adjust the display sharpness.
Gamma	Press the cursor ◀▶ button to enter and adjust the gamma correction of the display.
Color Temperature	Press the cursor ◀▶ button to enter and adjust the color temperature.
Video AGC	Press the cursor ◀▶ button to enter and enable or disable the Automatic Gain Control for video source.
Video Saturation	Press the cursor ◀▶ button to enter and adjust the video saturation.
Video Tint	Press the cursor ◀▶ button to enter and adjust the video tint/hue.
White Balance	Press the ENTER / ▶ button to enter the White Balance sub menu. See <i>White Balance</i> on page 31

White Balance

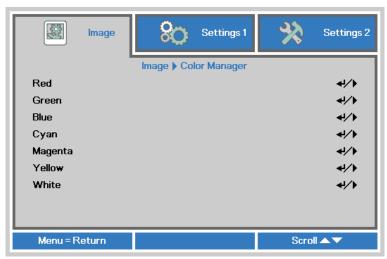
Press the **ENTER** button to enter the **White Balance** sub menu.



Ітем	DESCRIPTION
R Gain	Press the ◀▶ buttons to adjust the Red Gain.
G Gain	Press the ◀▶ buttons to adjust the Green Gain.
B Gain	Press the ◀▶ buttons to adjust the Blue Gain.
R Offset	Press the ◀▶ buttons to adjust the Red Offset.
G Offset	Press the ◀▶ buttons to adjust the Green Offset.
B Offset	Press the ◀▶ buttons to adjust the Blue Offset.

Color Manager

Press the **Menu** button to open the **OSD** menu. Press $\blacktriangleleft \triangleright$ to move to the **Image** menu. Press $\blacktriangledown \blacktriangle$ to move to the **Color Manager** menu and then press **Enter** or \blacktriangleright . Press $\blacktriangledown \blacktriangle$ to move up and down in the **Color Manager** menu.



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

Settings 1 Menu

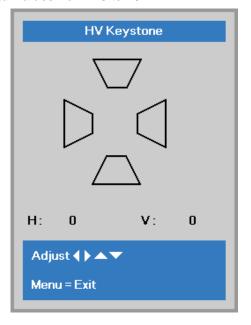
Press the **MENU** button to open the **OSD** menu. Press the cursor **◄►** button to move to the **Settings 1** menu. Press the cursor **▲▼** button to move up and down in the **Settings 1** menu. Press **◀►** to enter and change values for settings.



Ітем	DESCRIPTION
Source	Press the cursor ◀▶ button to enter the Source menu. Reference input Source select (IR / Keypad).
Projection	Press the cursor ◀▶ button to enter and choose from four projection methods:
Aspect Ratio	Press the cursor ◀▶ button to enter and adjust the video aspect ratio.
Keystone	Press
Digital Zoom	Press the cursor ◀▶ button to enter and adjust the Digital Zoom menu.
Audio	Press
Advanced 1	Press
Advanced 2	Press
4 Corner	Press

Keystone

Press the **Menu** button to open the **OSD** menu. Press $\blacktriangleleft \triangleright$ to move to the **Settings 1** menu. Press $\blacktriangledown \blacktriangle$ to move to the **Keystone** menu and then press **Enter** or \triangleright . Press $\blacktriangledown \blacktriangle$ to adjust vertical values from -30 to 30. Press $\blacktriangleleft \triangleright$ to adjust horizontal values from -25 to 25.



Audio

Press the **Menu** button to open the **OSD** menu. Press **▼** ▶ to move to the **Settings 1** menu. Press **▼** ▲ to move to the **Audio** menu and then press **Enter** or ▶. Press **▼** ▲ to move up and down in the **Audio** menu.



İTEM	DESCRIPTION
Volume	Press the cursor ◀▶ button to enter and adjust the audio volume.
Mute	Press the cursor ◀▶ button to enter and turn on or off the speaker.
Out	Press the cursor ◀▶ button to select audio output connector. Note: When select Off, the default sound is output from speakers.

Advanced 1 Feature

Press the **Menu** button to open the **OSD** menu. Press **◄** ► to move to the **Settings 1** menu. Press **▲** ▼ to move to the **Advanced 1** menu and then press **Enter** or ►. Press **▲** ▼ to move up and down in the **Advanced 1** menu. Press **◄** ► to enter and change values for setting.



Ітем	DESCRIPTION
Language	Press the cursor ◀▶ button to enter and select a different localization Menu.
Security Lock	Press the cursor ◀▶ button to enter and enable or disable security lock function.
Blank Screen	Press the cursor ◀▶ button to enter and select different color to blank the screen.
Splash Logo	Press the cursor ◀▶ button to enter and enable or disable Splash Logo.
Closed Captioning	Press the cursor ◀▶ button to enter and enable or disable Closed Captioning
Keypad Lock	Press the cursor ◀► button to enter and enable or disable keys can be work on keypad. Note: Hold the cursor ▼ button on keypad for 5 seconds to unlock keypad
3D Setting	Press

Note:

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

3D Setting



Ітем	DESCRIPTION
3D	Press the cursor ◀▶ button to enter and select different 3D mode.
3D Sync Invert	Press the cursor ◀▶ button to enter and enable or disable 3D Sync Invert.
3D Format	Press the cursor ◀▶ button to enter and enable or disable different 3D Format.

Note:

- 1. The 3D OSD menu item is gray if there is no appropriate 3D source. This is the default setting.
- When the projector is connected to an appropriate 3D source, the 3D OSD menu item is enabled for selection.
- 3. Use 3D glasses to view a 3D image.
- 4. You need 3D content from a 3D DVD or 3D media file.
- 5. You need to enable the 3D source (some 3D DVD content may have a 3D on-off selection feature).
- You need DLP link 3D or IR 3D shutter glasses. With IR 3D shutter glasses, you need to install a driver on your PC and connect a USB emitter.
- The 3D mode of the OSD needs to match the type of glasses (DLP link or IR 3D).
- 8. Power on the glasses. Glasses normally have a power on -off switch.

 Each type of glasses has their own configuration instructions. Please follow the configuration instructions that come with your glasses to finish the setup process.

Note:

Since different types of glass (DLP link or IR shutter glass) have their own setting instructions, Please follow the guide to finish the setup process.

Advanced 2 Feature

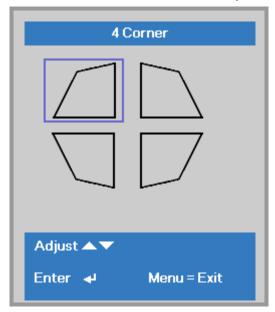
Press the **Menu** button to open the **OSD** menu. Press **◄** ► to move to the **Settings 1** menu. Press **▲** ▼ to move to the **Advanced 2** menu and then press **Enter** or ►. Press **▲** ▼ to move up and down in the **Advanced 2** menu. Press **◄** ► to enter and change values for setting.



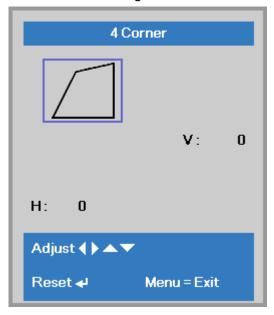
Ітем	DESCRIPTION
Test Pattern	Press the cursor ◀▶ button to enter and select internal test pattern.
H Image Shift	Press the cursor ◀▶ button to enter and select H Image Shift.
V Image Shift	Press the cursor ◀▶ button to enter and select V Image Shift.

4 Corner

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

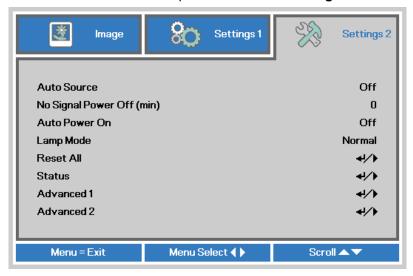


- 2. Press the cursor ▲ / ▼ buttons to adjust vertical and press the cursor ◀ / ▶ buttons to adjust horizontal.
- 3. Press **MENU** to save and Exit the settings.



Settings 2 Menu

Press the **MENU** button to open the **OSD** menu. Press the cursor **◄►** button to move to the **Settings 2** menu. Press the cursor **▲▼** button to move up and down in the **Settings 2** menu.



Ітем	DESCRIPTION
Auto Source	Press the cursor ◀▶ button to enter and enable or disable automatic source detection.
No Signal Power Off (min.)	Press the cursor ◀▶ button to enter and enable or disable automatic shutdown of lamp when no signal.
Auto Power On	Press the cursor ◀▶ button to enter and enable or disable automatic power On when AC power is supplied.
Lamp Mode	Press the cursor ◀▶ button to enter and select the lamp mode for higher brightness or lower brightness to save lamp life.
Reset All	Press
Status	Press
Advanced 1	Press
Advanced 2	Press

Note

Dynamic ECO: Auto power consumption saving according to your dynamic content (30% Max saving on blank screen).

Extreme Dimming: Saving 50% lamp power consumption by blank screen (press BLANK button)

Status

Press the cursor ▲ ▼ button to move up and down in the **Settings 2** menu. Select the **Status** menu and press **Enter** or ▶ to enter.



Ітем	DESCRIPTION
Active Source	Display the activated source.
Video Information	Displays resolution/video information for RGB source and color standard for Video source.
Lamp Hours	Lamp hour used information is displayed. (Eco, Normal, Dynamic Eco)
Software Version	Showing system software version.
Remote ID	Showing Remote Controller ID
Serial Number	Showing serial number of product.
Air Filter Hour	Displays the number of hours the air filter has been in use.

Advanced 1 Feature

Press the **Menu** button to open the **OSD** menu. Press **◄** ► to move to the **Settings 2** menu. Press **▲** ▼ to move to the **Advanced 1** menu and then press **Enter** or ►. Press **▲** ▼ to move up and down in the **Advanced 1** menu. Press **◄** ► to enter and change values for setting.



Ітем	DESCRIPTION
Menu Position	Press the cursor ◀▶ button to enter and select different OSD location.
Translucent Menu	Press the cursor ◀▶ button to enter and select OSD background translucent level.
Low Power Mode	Press the cursor ◀▶ button to enter and turn Low Power Mode Off, On or On By Lan.
Fan Speed	Press the cursor ◀▶ button to enter and toggle between Normal and High fan speeds. Note: We recommend selecting high speed in high temperatures, high humidity, or high altitude (higher than 1500m/4921ft) areas.
Lamp Hour Reset	After replacing the lamp, this item should be reset. See page 42 for more information on <i>Lamp Hour Reset</i> .
Projector ID	Press the cursor ◀▶ button to enter and adjust a two digit projector ID from 00 through 98.
Remote ID	Press the cursor ◀▶ buttons to select remote ID to fit the current remote ID settings.
Network	Press

Note:

About "On By Lan", RJ45 will support to be waked up in this mode(Under 6W) but scalar won't.

Note:

- 1. Remoter with Default customer code will be available for any Remote ID setting on the OSD.
- 2. Status key will be available for any Remote ID setting on the OSD
- 3. IF users forget the current Remote ID setting, please press the Status key to call out the INFORMATION OSD to check the current Remote ID setting and then adjust the ID on the remoter to meet the OSD setting.
- 4. After adjusting Remote ID from OSD, only if the OSD Menu has been closed then the new ID value can be taken effected and memorized.
- 5. The setting value "Default" means ID 0 on the remoter.

Lamp Hour Reset



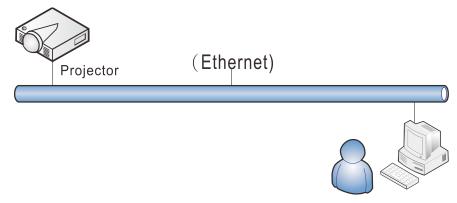
Please refer to Resetting the Lamp on page 58 to reset the lamp hour counter.

Network



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

LAN RJ45



Wired LAN Terminal functionalites

Remote control and monitoring of a projector from a PC (or Laptop) via wired LAN is also possible. Compatibility with Crestron / AMX (Device Discovery) / Extron control boxes enables not only collective projector management on a network but also management from a control panel on a PC (or Laptop) browser screen.

- ★ 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.
- ★ PJLink applied for trademark and logo registration in Japan, the United States of America, and other countries by JBMIA.

Supported External Devices

This projector is supported by the specified commands of the Crestron Electronics controller and related software (ex, RoomView ®).

http://www.crestron.com/

This projector is supported by AMX (Device Discovery).

http://www.amx.com/

This projector is compliant to support Extron device(s) for reference.

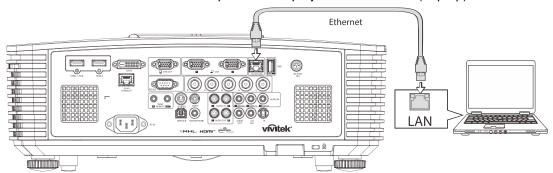
http://www.extron.com/

This projector supports all commands of PJLink Class1 (Version 1.00). http://pjlink.jbmia.or.jp/english/

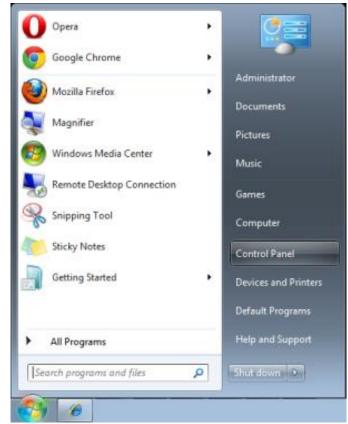
For more detail of information about the diverse types of external devices which can be connected to the LAN/RJ45 port and remote/control the projector, as well as the related control commands supporting for each external device, kindly please get contact with the Support-Service team directly.

LAN_RJ45

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



2. On the PC (Laptop), select $Start \rightarrow Control\ Panel\ \rightarrow Network\ and\ Internet.$

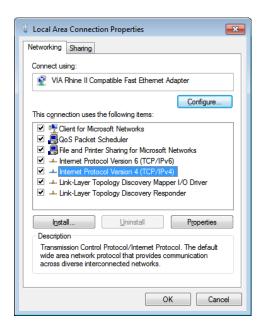




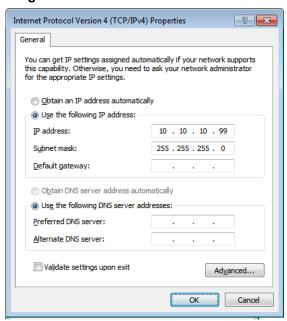
3. Right-click on Local Area Connection, and select Properties.



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



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



- 7. Press the **Menu** button on the projector.
- 8. Select Settings2→ Advanced1 → Network
- 9. After getting into **Network**, input the following:

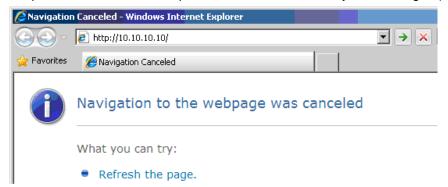
▶ DHCP: Off

▶ IP Address: 10.10.10.10 ▶ Subnet Mask: 255.255.255.0

▶ Gateway: 0.0.0.0▶ DNS Server: 0.0.0.0

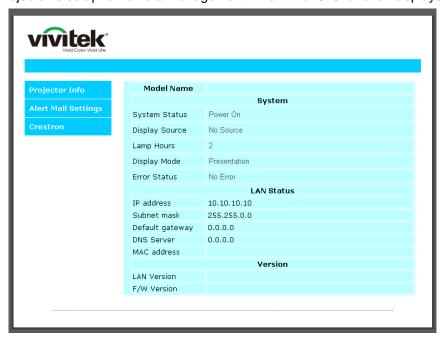
Open a web browser

(for example, Microsoft Internet Explorer with Adobe Flash Player 9.0 or higher).

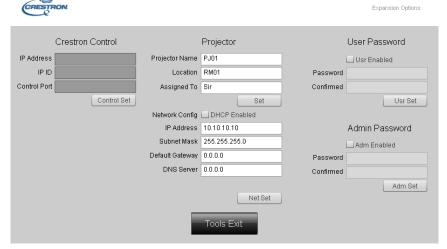


- 11. In the Address bar, input the IP address: 10.10.10.10.
- 12. Press **←** (Enter) / ►.

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







CATEGORY	ITEM	INPUT-LENGTH
	IP Address	15
Crestron Control	IP ID	3
	Port	5
	Projector Name	10
Projector	Location	10
	Assigned To	10
	DHCP (Enabled)	(N/A)
	IP Address	15
Network Configuration	Subnet Mask	15
	Default Gateway	15
	DNS Server	15
	Enabled	(N/A)
User Password	New Password	10
	Confirm	10
	Enabled	(N/A)
Admin Password	New Password	10
	Confirm	10

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

Preparing Email Alerts

- 1. Make sure that user can access the homepage of LAN RJ45 function by web browser (for ex-ample, Microsoft Internet Explorer v6.01/v8.0).
- 2. From the Homepage of LAN/RJ45, click Alert Settings.



3. By default, these input boxes in Alert Settings are blank.



4. For Sending alert mail, input the following:

The SMTP field is the mail server for sending out email (SMTP protocol). This is a required field.

The **To** field is the recipient's email address (for example, the projector administrator). This is a required field.

The **Cc** field sends a carbon copy of the alert to the specified email address. This is an optional field (for example, the projector administrator's assistant).

The **From** field is the sender's email address (for example, the projector administrator). This is a required field.

Select the alert conditions by checking the desired boxes.



Note: Fill in all fields as specified. User can click **Send Test Mail** to test what setting is correct. For successful sending an e-mail alert, you must select alert conditions and enter a correct e-mail address.

RS232 by Telnet Function

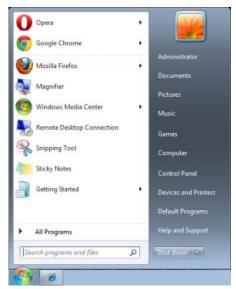
Besides projector connected to RS232 interface with "Hyper-Terminal" communication by dedicated RS232 command control, there is alternative RS232 command control way, so called "RS232 by TELNET" for LAN/RJ45 interface.

Quick Start-Guide for "RS232 by TELNET"

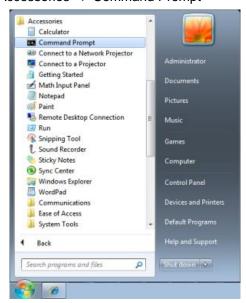
Check and get the IP-Address on OSD of the projector.

Make sure that laptop/PC can access the web-page of the projector.

Make sure that "Windows Firewall" setting to be disabled in case of "TELNET" function filtering out by laptop/PC.



Start => All Programs => Accessories => Command Prompt



Input the command format like the below:

telnet ttt.xxx.yyy.zzz 23 ("Enter" key pressed)

(ttt.xxx.yyy.zzz: IP-Address of the projector)

If Telnet-Connection ready, and user can have RS232 command input, then "Enter" key pressed, the RS232 command will be workable.

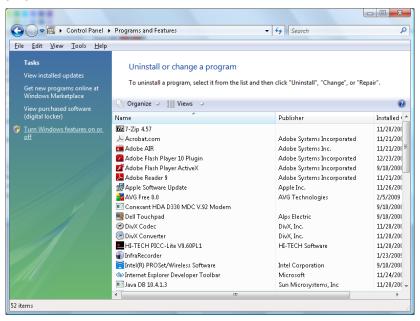
How to have TELNET enabled in Windows VISTA / 7

By default installation for Windows VISTA, "TELNET" function is not included. But end-user can have it by way of "Turn Windows features On or Off" to be enabled.

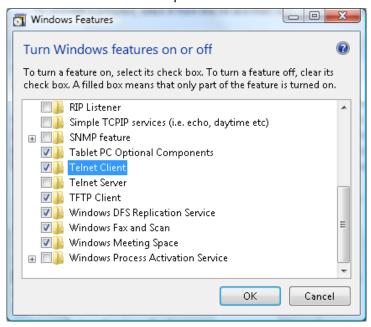
Open "Control Panel" in Windows VISTA



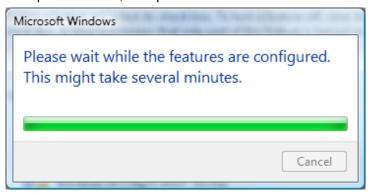
Open "Programs"



Select "Turn Windows features on or off" to open



Have "Telnet Client" option checked, then press "OK" button.



Specsheet for "RS232 by TELNET":

- 1. Telnet: TCP
- 2. Telnet port: 23

(for more detail, kindly please get contact with the service agent or team)

- 3. Telnet utility: Windows "TELNET.exe" (console mode)
- 4. Disconnection for RS232-by-Telnet control normally: Close Windows Telnet utility directly after TELNET connection ready
- 5. Limitation 1 for Telnet-Control: there is less than 50 bytes for successive network payload for Telnet-Control application.

Limitation 2 for Telnet-Control: there is less than 26 bytes for one complete RS232 command for Telnet-Control.

Limitation 3 for Telnet-Control: Minimum delay for next RS232 command must be more than 200 (ms).

(*, In Windows built-in "TELNET.exe" utility, "Enter" key pressed will have "Carriage-Return" and "New-Line" code.)

Advanced 2 Feature

Press the **Menu** button to open the **OSD** menu. Press **◄** ► to move to the **Settings 2** menu. Press **▲** ▼ to move to the **Advanced 2** menu and then press **Enter** or ►. Press **▲** ▼ to move up and down in the **Advanced 2** menu. Press **◄** ► to enter and change values for setting.



Ітем	DESCRIPTION
Sleep Timer	Press the cursor ◀▶ button to enter and set Sleep timer. The projector automatically turns off after the preset period of time.
Source Filter	Press
Air Filter Timer Reset	Press

Source Filter

Press the **ENTER** button to enter the **Source Filter** sub menu.



Ітем	DESCRIPTION
HDMI1/MHL	Press the cursor ◀▶ button to enter and enable or disable the HDMI1/ MHL-compatible source.
HDMI2	Press the cursor ◀▶ button to enter and enable or disable the HDMI2 source.
DVI	Press the cursor ◀▶ button to enter and enable or disable the DVI source.
VGA1	Press the cursor ◀▶ button to enter and enable or disable the VGA1 source.
VGA2	Press the cursor ◀▶ button to enter and enable or disable the VGA2 source.
BNC	Press the cursor ◀▶ button to enter and enable or disable the BNC source.
S-Video	Press the cursor ◀▶ button to enter and enable or disable the S-Video source.
Composite Video	Press the cursor ◀▶ button to enter and enable or disable the Composite Video source.
HDBaseT(*)	Press the cursor ◀▶ button to enter and enable or disable the HDBaseT source.

Note:

(*) Available in DH3331/DU3341

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.



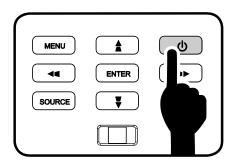
IF A LAMP EXPLODES

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.

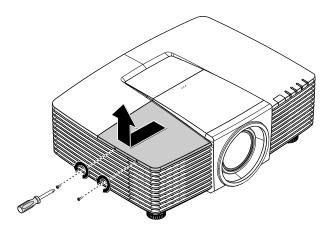
Open windows and doors for ventilation.

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

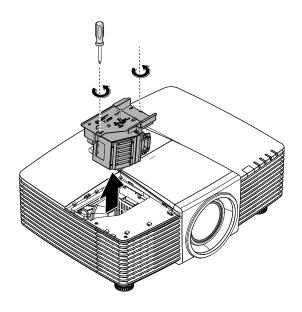
- 1. Switch off the power to the projector by pressing the **POWER** button.
- Allow the projector to cool down at least 30 minutes.
- **3.** Disconnect the power cord.



- **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.

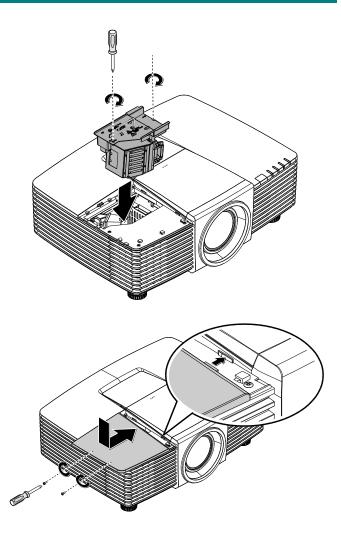


8. Reverse steps 1 to 7 to install the new lamp module.

While installing, align the lamp module with the connector and ensure it is level to avoid damage.

Note:

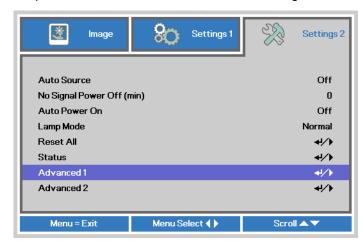
The lamp module must sit securely in place and the lamp connector must be connected properly before tightening the screws.



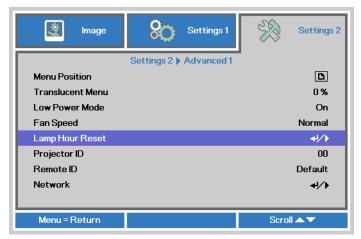
Resetting the Lamp

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

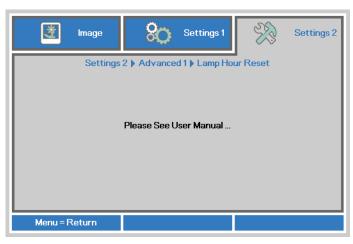
- Press the **MENU** button to open the OSD menu.
- Press the cursor ◀► button to move to the Settings 2 menu. Press the cursor button to move down to Advanced 1 and press enter.



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



- **4.** Press the cursor ▶ or Enter button.
 - A message screen appears.
- **5.** Press ▼ ▲ **→** buttons to reset the lamp hour.
- **6.** Press the **MENU** button to get back to **Settings 2**.



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.



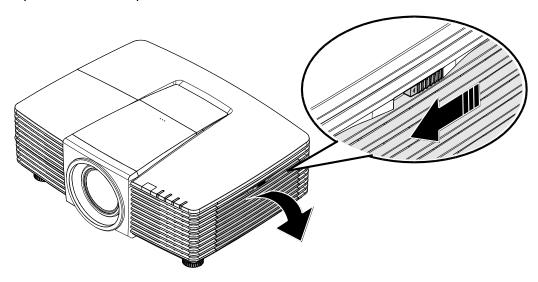
Caution:

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

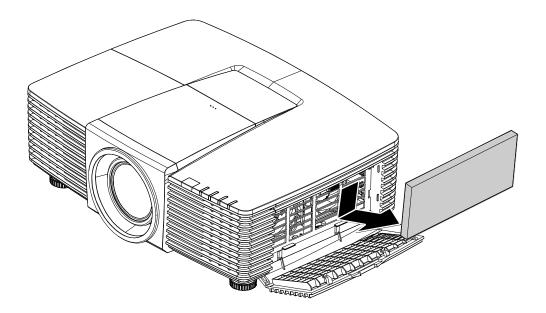
Cleaning the Air Filter

Refer to the following to clean the air filter.

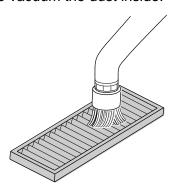
1. Open the latch to open the filter door.



2. Remove the filter.

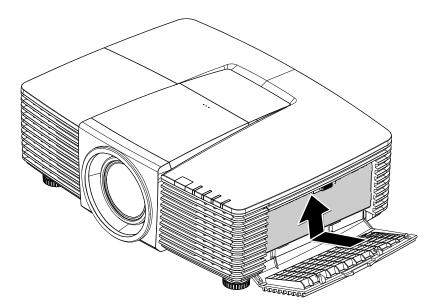


3. Use a vacuum cleaner to vacuum the dust inside.

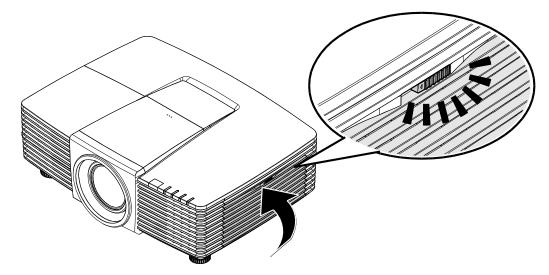


Note:

- 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 Air Filter Timer after the Air Filter is replaced. Air Filter Timer Reset:

Press MENU > Select Settings 2 >> Advanced 2 and select Air Filter Timer Reset.

Press ← (Enter) / ► to reset timer.



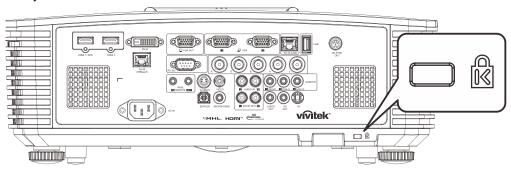
The Filter LED lights when the filter service time is on (1000 hours).

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:

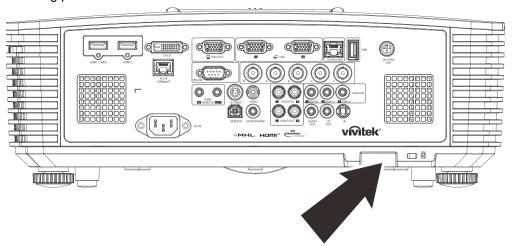
Contact your vendor for details on purchasing a suitable Kensington security cable.

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	Blue	OFF	OFF	OFF
Start	Flashing (Amber)	OFF	OFF	OFF
Cooling	Flashing (Amber)	OFF	OFF	OFF
Over Temperature	OFF	OFF	ON	OFF
Air Filter Timer warning (over or equal 1000hrs)	ON	OFF	OFF	ON
T1 error	3 blinks	1 blinks	OFF	OFF
Thermal Break Sensor error	4 blinks	OFF	OFF	OFF
G794 error	4 blinks	4 blinks	OFF	OFF
Lamp fail	5 blinks	OFF	OFF	OFF
Ballast temp over	5 blinks	1 blinks	OFF	OFF
Ballast circuit short	5 blinks	2 blinks	OFF	OFF
Lamp End of lamp life detected	5 blinks	3 blinks	OFF	OFF
Lamp did not ignite	5 blinks	4 blinks	OFF	OFF
Lamp extinguished during normal operation	5 blinks	5 blinks	OFF	OFF
Lamp extinguished during run-up phase	5 blinks	6 blinks	OFF	OFF
Lamp voltage too low	5 blinks	7 blinks	OFF	OFF
Ballast fail	5 blinks	8 blinks	OFF	OFF
Ballast communication fail	5 blinks	10 blinks	OFF	OFF
Ballast over temp	5 blinks	11 blinks	OFF	OFF
Restrike lamp fail 1	5 blinks	12 blinks	OFF	OFF
Restrike lamp fail 2	5 blinks	13 blinks	OFF	OFF
Lamp fail 1	5 blinks	14 blinks	OFF	OFF
Lamp fail 2	5 blinks	15 blinks	OFF	OFF
Fan 1 error	6 blinks	1 blinks	OFF	OFF
Fan 2 error	6 blinks	2 blinks	OFF	OFF
Fan 3 error	6 blinks	3 blinks	OFF	OFF
Fan 4 error	6 blinks	4 blinks	OFF	OFF
Fan 5 error	6 blinks	5 blinks	OFF	OFF
Case Open	7 blinks	OFF	OFF	OFF
DMD error	8 blinks	OFF	OFF	OFF
Color wheel error	9 blinks	OFF	OFF	OFF

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 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 Settings 1 menu of the OSD.

Problem: The image is streaked

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

Problem: The image is flat with no contrast

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

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

Adjust the **Color Temperature** and **Gamma** settings on the **Image->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	e	DX3350	DW3320	DH3331						
Display Typ	е	0.7" XGA	0.65" WXGA	0.65" 1080P						
Resolution		1024x768 Native	1280x800 Native	1920x1080p Native						
Projection D	Distance		1 meters ~ 10 meters							
Projection S	Screen Size	22.3"~378.6" inches	20.7"~351.7" inches	21.2"~361.4" inches						
Projection L	_ens		Manual Focus/Manual Zoom	1						
Zoom Ratio		1.7x								
Keystone	Vertical	±30° for ±30 steps								
Correction	Horizontal		±25° for ±25 steps							
Projection N	Methods	Front, I	Rear, Desktop/Ceiling (Rear	, Front)						
Data Compa	atibility	VGA, SVGA, XGA	, SXGA, SXGA+, UXGA, WI	JXGA@60hz, Mac						
SDTV/EDTV	SDTV/EDTV/ HDTV 480i, 480p, 576i, 576p, 720p, 1080i, 1080p									
Video Comp	oatibility	NTSC/ NTSC (M, 3.58/4.4	3 MHz), PAL (B,D,G,H,I,M,N	N), SECAM (B,D,G,K,K1,L)						
H-Sync			15, 31 – 91.4kHz							
V-Sync		24 - 30Hz, 47 – 120 Hz								
Safety Certi	fication	FCC-B, cUL, UL, CB, CE, CCC, KC, PCT, NOM, China CECP, C-tick								
Operation Temperature	е	5° ~ 40°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 Cons	sumption	480W (Normal), 380W (Eco) , <0.5W (Standby), <2W (on by Lan)								
Lamp		(370W (Normal) / 280W (Eco)						
Audio Spea	ker		7W RMS x 2							
			VGA x 2							
			DVI-D x 1							
			S-Video x 1							
			5 BNC (RGBHV) x 1							
			Mini-jack Stereo x 3							
Input Termi	nals		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 1							
		-	-	RJ45 (HDBaseT)						

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	VGA x 1							
Output Terminals	Audio RCA (R/L) x 1							
Output Terminais	PC audio x 1							
	3D-Sync x 1							
	RS-232C x 1							
	RJ45 x 1							
Control Terminals	Screen Trigger: DC Jack x 1 (DC12V 200mA output function)							
Control Terminais	Wired Remote In x 1							
	Wired Remote Out x 1							
	USB Type B for service x 1							
Society	Kensington Security Slot							
Security	Security Bar							

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

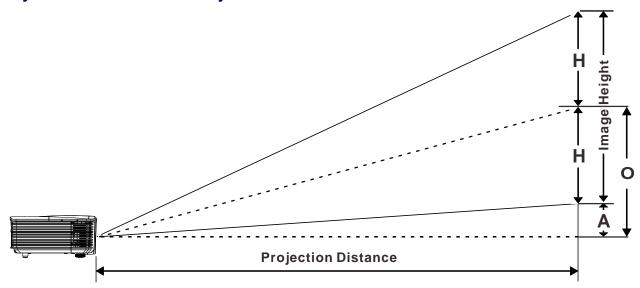
Specifications

Model Name	Э	DH3330	DU3340	DU3341							
Display Typ	е	0.65" 1080P	0.67" WUXGA	0.67" WUXGA							
Resolution		1920x1080p Native	1920x1200 Native	1920x1200 Native							
Projection I	Distance		1 meters ~ 10 meters								
Projection S	Screen Size	21.2"~361.4" inches 21.8"~371.4" inches 21.8"~371.4" inch									
Projection L	-ens		Manual Focus/Manual Zoom								
Zoom Ratio		1.7x									
Keystone	Vertical	±30° for ±30 steps									
Correction	Horizontal		±25° for ±25 steps								
Projection N	Methods	Front, I	Rear, Desktop/Ceiling (Rear	, Front)							
Data Compa	atibility	VGA, SVGA, XGA	, SXGA, SXGA+, UXGA, Wl	JXGA@60hz, Mac							
SDTV/EDTV	/ HDTV	480i, 480p, 576i, 576p, 720p, 1080i, 1080p									
Video Comp	oatibility	NTSC/ NTSC (M, 3.58/4.4	3 MHz), PAL (B,D,G,H,I,M,N	I), SECAM (B,D,G,K,K1,L)							
H-Sync			15, 31 – 91.4kHz								
V-Sync		24 - 30Hz, 47 – 120 Hz									
Safety Certi	fication	FCC-B, cUL, UL, CB, CE, CCC, KC, PCT, NOM, China CECP, C-tick									
Operation Temperatur	e		5° ~ 40°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 Cons	sumption	480W (Normal), 380W (Eco) , <0.5W (Standby), <2W (on by Lan)									
Lamp		3	370W (Normal) / 280W (Eco)							
Audio Spea	ker		7W RMS x 2								
			VGA x 2								
			DVI-D x 1								
			S-Video x 1								
			5 BNC (RGBHV) x 1								
			Mini-jack Stereo x 3								
Input Termi	nals		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 1								
		-	-	RJ45 (HDBaseT)							

	VGA x 1						
Output Terminals	Audio RCA (R/L) x 1						
Output Terminais	PC audio x 1						
	3D-Sync x 1						
	RS-232C x 1						
	RJ45 x 1						
Control Terminals	Screen Trigger : DC Jack x 1 (DC12V 200mA output function)						
Control Terminals	Wired Remote In x 1						
	Wired Remote Out x 1						
	USB Type B for service x 1						
Socurity	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

DW3320 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	

DX3350 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	379
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

DH3331 0.65" 1080P

			TELE			WIDE				
Distance (m)	1.89	3.77	4.72	9.43	10	1.38	2.77	5.53	8.30	10
Diagonal (")	40	80	100	200	212.1	50	100	200	300	361
Image Width (cm)	88.6	177.1	221.4	442.8	469.5	110.7	221.4	442.8	664.1	800.1
Image Height (cm)	49.8	99.6	124.5	249.1	264.1	62.3	124.5	249.1	373.6	450.0
H (cm)	24.9	49.8	62.3	124.5	132.1	31.1	62.3	124.5	186.8	225.0
O (cm)	33.8	67.7	84.6	169.2	179.5	42.3	84.6	169.2	253.8	305.8
A (cm)	8.9	17.9	22.4	44.7	47.4	11.2	22.4	44.7	67.1	80.8

DH3330 0.65" 1080P

	TELE						Wide				
Distance (m)	1.89	3.77	4.72	9.43	10	1.38	2.77	5.53	8.30	10	
Diagonal (")	40	80	100	200	212	50	100	200	300	361	
Image Width (cm)	88.6	177.1	221.4	442.8	469.4	110.7	221.4	442.8	664.1	800.0	
Image Height (cm)	49.8	99.6	124.5	249.0	264.1	62.3	124.5	249.0	373.6	450.0	
H (cm)	24.9	49.8	62.3	124.5	132.0	31.1	62.3	124.5	186.8	225	
O (cm)	33.8	67.7	84.7	169.2	179.4	42.3	84.7	169.2	253.9	305.8	
A (cm)	8.9	17.9	22.4	44.7	47.4	11.2	22.4	44.7	67.1	80.8	

DU3340 / DU3341 0.67" WUXGA

			TELE			WIDE				
Distance (m)	1.84	3.67	4.59	9.18	10	1.35	2.69	5.38	8.08	10
Diagonal (")	40	80	100	200	218	50	100	200	300	371
Image Width (cm)	86.2	172.3	215.4	430.8	469.4	107.7	215.4	430.8	646.2	800.0
Image Height (cm)	53.8	107.7	134.6	269.2	293.4	67.3	134.6	269.2	403.9	500.0
H (cm)	26.9	53.8	67.3	134.6	132.0	33.7	67.3	134.6	201.9	250
O (cm)	32.9	65.9	82.4	164.8	164.9	41.2	82.4	164.8	247.1	306
A (cm)	6.0	12.1	15.1	30.2	32.9	7.5	15.1	30.2	45.2	56

Timing Mode Table

The projector can display several resolutions. The following table outlines the resolutions that can be displayed by the projector.

SIGNAL	RESOLUTION	H-SYNC (KHz)	V-SYNC (Hz)	COMPOSITE S_VIDEO	COMPONENT	RGB (ANALOG)	DP/HDMI (DIGITAL)
NTSC	_	15.7	60.0	0	_	_	_
PAL/SECAM	_	15.6	50.0	0	_	_	_
	720 x 400	31.5	70.1	_	_	0	0
	720 x 400	37.9	85.0	_	_	0	0
	640 x 480	31.5	60.0	_	_	0	0
	640 x 480	37.9	72.8	_	_	0	0
	640 x 480	37.5	75.0	_	_	0	0
	640 x 480	43.3	85.0	_	_	0	0
	800 x 600	35.2	56.3	_	_	0	0
	* 800 x 600	37.9	60.3	_	_	0	0
	800 x 600	46.9	75.0	_	_	0	0
	800 x 600	48.1	72.2	_	_	0	0
	800 x 600	53.7	85.1	_	_	0	0
	** 800 x 600	76.3	120.0	_	_	0	0
	* 1024 x 768	48.4	60.0	_	_	0	0
	1024 x 768	56.5	70.1	_	_	0	0
	1024 x 768	60.0	75.0	_	_	0	0
	1024 x 768	68.7	85.0	_	_	0	0
	** 1024 x 768	97.6	120.0	_	_	0	0
	1024 x 768	99.0	120.0	_	_	0	0
	1152 x 864	67.5	75.0	_	_	0	0
	* 1280 x 720	45.0	60.0	_	_	0	0
\ (E O A	* 1280 x 720	90.0	120.0	_	_	0	0
VESA	1280 x 768	47.4	60.0	_	_	0	0
	* 1280 x 768	47.8	59.9	_	_	0	0
	* 1280 x 800	49.7	59.8	_	_	0	0
	1280 x 800	62.8	74.9	_	_	0	0
	1280 x 800	71.6	84.9	_	_	0	0
	** 1280 x 800	101.6	119.9	_	_	0	0
	*** 1280 x 1024	64.0	60.0	_	_	0	0
	1280 x 1024	80.0	75.0	_	_	0	0
	1280 x 1024	91.1	85.0	_	_	0	0
	*** 1280 x 960	60.0	60.0	_	_	0	0
	1280 x 960	85.9	85.0	_	_	0	0
	*** 1366 x 768	47.7	60.0	_	_	0	0
	*** 1400 x 1050	65.3	60.0	_	_	0	0
	1440 x 900	55.5	59.9	_	_	0	0
	*** 1440 x 900	55.9	59.9	_	_	0	0
	1440 x 900	70.6	75.0	_	_	0	0
	1600 x1200	75.0	60.0	_	_	0	0
	1680 x 1050	64.7	59.9	_	_	0	0
	1680 x 1050	65.3	60.0	_	_	0	0
	1920 x 1200	74.0	60.0	_	_	0	0
	1920 x 1080	67.5	60.0	_	_	0	0

Signal	RESOLUTION	H-SYNC (KHz)	V-SYNC (Hz)	COMPOSITE S_VIDEO	COMPONENT	RGB (Analog)	DP/HDMI (DIGITAL)
	640 x 480	35.0	66.7	_	_	0	0
Apple	832 x 624	49.7	74.5	_	_	0	0
Macintosh	1024 x 768	60.2	74.9	_	_	0	0
	1152 x 870	68.7	75.1	_	_	0	0
CDTV	480i	15.7	60.0	_	0	_	0
SDTV	576i	15.6	50.0	_	0	_	0
EDT) /	576p	31.3	50.0	_	0	_	0
EDTV	480p	31.5	60.0	_	0	_	0
	720p	37.5	50.0	_	0	_	0
	720p	45.0	60.0	_	0	_	0
	1080i	33.8	60.0	_	0	_	0
	1080i	28.1	50.0	_	0	_	0
HDTV	1080p	27.0	24.0	_	0	_	0
	1080p	28.0	25.0	_	0	_	0
	1080p	33.7	30.0	_	0	_	0
	1080p	56.3	50.0	_	0	_	0
	1080p	67.5	60.0	_	0	_	0

O: Frequency supported

—: Frequency not supported

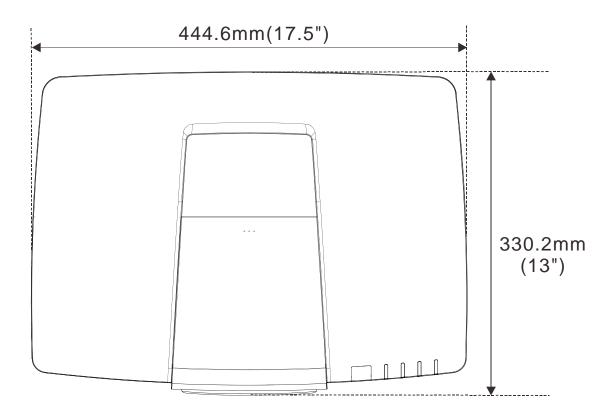
★3D note:

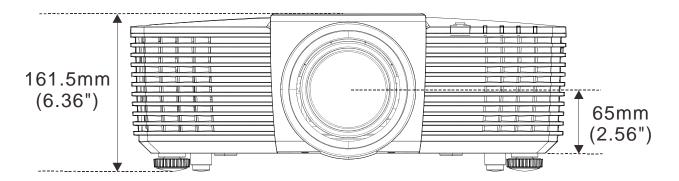
- "★" It means the timing can support non-3D and 3D signal with Frame Sequential and Top-Bottom format.
- "★★"It means the timing can support non-3D and 3D signal with Frame Sequential format.
- "★★★"It means the timing can support non-3D and 3D signal with Top-Bottom format.

There 3D timing showing depend the EDID file and display card. It is possible that user cannot choose the above 3D timings on display card.

- ★The resolution of the panel is 1280 x 800. Resolution other than native resolution may display with uneven size of text or lines.
- **★**The color of mean Displayable only. (4:3 only)
- ★The color of ____ mean may have a little noise is acceptable, Because video mode sync don't auto adjustment.
- ★HDTV timing main check tool is DVD player, VG828 is secondary

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, cUL, UL, CB, CE, CCC, KC, PCT, NOM, China CECP, and C-tick.

APPENDIX I

RS-232C Protocol

RS232 Setting

Baud rate:	9600
Parity	None
check:	
Data bit:	8
Stop bit:	1
Flow Control	None

Minimum delay for next command: 1ms

Control Command Structure

	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/Value(0~9999)

	Command Group 00				
ASCII	HEX	Function	Description	Return Result	
VXXS0001	56h Xh Xh 53h 30h 30h 30h 31h 0Dh	Power On		P/F	
VXXS0002	56h Xh Xh 53h 30h 30h 30h 32h 0Dh	Power Off		P/F	
VXXS0003	56h Xh Xh 53h 30h 30h 30h 33h 0Dh	Resync		P/F	
VXXG0004	56h Xh Xh 47h 30h 30h 30h 34h 0Dh	Get Lamp Hours		Pn/F	
VXXS0005n	56h Xh Xh 53h 30h 30h 35h nh 0Dh	Set Air filter timer	n=0~99999	P/F	
VXXG0005	56h Xh Xh 47h 30h 30h 30h 35h 0Dh	Get Air filter timer	n=0~99999	Pn/F	
VXXS0006	56h Xh Xh 53h 30h 30h 30h 36h 0Dh	System Reset		P/F	
VXXG0007	56h Xh Xh 47h 30h 30h 30h 37h 0Dh	Get System Status	0: Reset 1:Standby 2:Operation 3:Cooling	Pn/F	
VXXG0008	56h Xh Xh 47h 30h 30h 30h 38h 0Dh	Get F/W Version		Pn/F	
VXXG0009	56h Xh Xh 47h 30h 30h 30h 39h 0Dh	Get Alter EMail		Pn/F	
VXXS0009n	56h Xh Xh 53h 30h 30h 39h nh 0Dh	Set Alter Email	n=xxxxxx@xxxx.x xx.xx	P/F	
VXXS0010	56h Xh Xh 53h 30h 30h 31h 30h 0Dh	Lamp Hours Reset		P/F	

	Command Group 01				
ASCII	HEX	Function	Description	Return Value	
VXXG0101	56h Xh Xh 47h 30h 31h 30h 31h 0Dh	Get Brightness	n=0~100	Pn/F	
VXXS0101n	56h Xh Xh 53h 30h 31h 30h 31h nh 0Dh	Set Brightness	n=0~100	P/F	
VXXG0102	56h Xh Xh 47h 30h 31h 30h 32h 0Dh	Get Contrast	n=0~100	Pn/F	
VXXS0102n	56h Xh Xh 53h 30h 31h 30h 32h nh 0Dh	Set Contrast	n=0~100	P/F	
VXXG0103	56h Xh Xh 47h 30h 31h 30h 33h 0Dh	Get Color	n=0~100	Pn/F	
VXXS0103n	56h Xh Xh 53h 30h 31h 30h 33h nh 0Dh	Set Color	n=0~100	P/F	
VXXG0104	56h Xh Xh 47h 30h 31h 30h 34h 0Dh	Get Tint	n=0~100	Pn/F	
VXXS0104n	56h Xh Xh 53h 30h 31h 30h 34h nh 0Dh	Set Tint	n=0~100	P/F	
VXXG0105	56h Xh Xh 47h 30h 31h 30h 35h 0Dh	Get Sharpness	0~31	Pn/F	
VXXS0105n	56h Xh Xh 53h 30h 31h 30h 35h nh 0Dh	Set Sharpness	0~31	P/F	
VXXG0106	56h Xh Xh 47h 30h 31h 30h 36h 0Dh	Get Color Temperature	0:Warm 1:Normal 2:Cold	Pn/F	
VXXS0106n	56h Xh Xh 53h 30h 31h 30h 36h nh 0Dh	Set Color Temperature	0:Warm 1:Normal 2:Cold	P/F	
VXXG0107	56h Xh Xh 47h 30h 31h 30h 37h 0Dh	Get Gamma	0:1.8 1:2.0C 2:2.2 3:2.4 4:B&W 5:Linear	Pn/F	
VXXS0107n	56h Xh Xh 53h 30h 31h 30h 37h nh 0Dh	Set Gamma	0:1.8 1:2.0C 2:2.2 3:2.4 4:B&W 5:Linear	P/F	
VXXG0108	56h Xh Xh 47h 30h 31h 30h 38h 0Dh	Get Display Mode	0: Presentation 1:Bright 2:Game 3:Movie 4.Vivid 5:TV 6:sRGB 7.DICOM SIM 8:User	Pn/F	
VXXS0108n	56h Xh Xh 53h 30h 31h 30h 38h nh 0Dh	Set Display Mode	0: Presentation 1:Bright 2:Game 3:Movie 4.Vivid 5:TV 6:sRGB 7.DICOM SIM 8:User	P/F	

	Command Group 02				
ASCII	HEX	Function	Description	Return Value	
VXXS0201	56h Xh Xh 53h 30h 32h 30h 31h 0Dh	Select RGB		P/F	
VXXS0202	56h Xh Xh 53h 30h 32h 30h 32h 0Dh	Select RGB2		P/F	
VXXS0203	56h Xh Xh 53h 30h 32h 30h 33h 0Dh	Select DVI		P/F	
VXXS0204	56h Xh Xh 53h 30h 32h 30h 34h 0Dh	Select Video		P/F	
VXXS0205	56h Xh Xh 53h 30h 32h 30h 35h 0Dh	Select S-Video		P/F	
VXXS0206	56h Xh Xh 53h 30h 32h 30h 36h 0Dh	Select HDMI		P/F	
VXXS0207	56h Xh Xh 53h 30h 32h 30h 37h 0Dh	Select BNC		P/F	
VXXS0208	56h Xh Xh 53h 30h 32h 30h 38h 0Dh	Select Component		P/F	
VXXS0209	56h Xh Xh 53h 30h 32h 30h 39h 0Dh	Select HDMI 2		P/F	
VXXS0210	56h Xh Xh 53h 30h 32h 31h 30h 0Dh	Select Display Port		P/F	
VXXS0211	56h Xh Xh 53h 30h 32h 31h 31h 0Dh	Select Multi Media		P/F	
VXXS0215	56h Xh Xh 53h 30h 32h 31h 35h 0Dh	Select HDBASET		P/F	
VXXG0220	56h Xh Xh 47h 30h 32h 32h 30h 0Dh	Get Current Source	Return 1:RGB 2:RGB2 3:DVI 4:Video 5:S-Video 6:HDMI 7:BNC 8:Component 9:HDMI 2 10:Display Port 11.Multi Media 15:HDBASET	Pn/F	

Command Group 03				
ASCII	HEX	Function	Description	Return Value
VXXG0301	56h Xh Xh 47h 30h 33h 30h 31h 0Dh	Get Scaling	0: Fill 1: 4:3 2: 16:9 3: Letter Box 4: Native 5: 2.35:1	Pn/F
VXXS0301n	56h Xh Xh 53h 30h 33h 30h 31h nh 0Dh	Set Scaling	0: Fill 1: 4:3 2: 16:9 3: Letter Box 4: Native 5: 2.35:1	P/F
VXXG0302	56h Xh Xh 47h 30h 33h 30h 32h 0Dh	Blank		Pn/F
VXXS0302n	56h Xh Xh 53h 30h 33h 30h 32h nh 0Dh	Blank		P/F
VXXG0303	56h Xh Xh 47h 30h 33h 30h 33h 0Dh	Auto Keystone On		Pn/F
VXXS0303n	56h Xh Xh 53h 30h 33h 30h 33h nh 0Dh	Auto Keystone On		P/F
VXXG0304	56h Xh Xh 47h 30h 33h 30h 34h 0Dh	Freeze On		Pn/F
VXXS0304n	56h Xh Xh 53h 30h 33h 30h 34h nh 0Dh	Freeze On		P/F
VXXG0305	56h Xh Xh 47h 30h 33h 30h 35h 0Dh	Volume	n=0~10	Pn/F
VXXS0305n	56h Xh Xh 53h 30h 33h 30h 35h nh 0Dh	Volume	n=0~10	P/F

	Command Group 03				
ASCII	HEX	Function	Description	Return Value	
VXXG0306	56h Xh Xh 47h 30h 33h 30h 36h 0Dh	Treble	n=0~16	Pn/F	
VXXS0306n	56h Xh Xh 53h 30h 33h 30h 36h nh 0Dh	Treble	n=0~16	P/F	
VXXG0307	56h Xh Xh 47h 30h 33h 30h 37h 0Dh	Bass	n=0~16	Pn/F	
VXXS0307n	56h Xh Xh 53h 30h 33h 30h 37h nh 0Dh	Bass	n=0~16	P/F	
VXXG0308	56h Xh Xh 47h 30h 33h 30h 38h 0Dh	Projection Mode	0:Front 1:Rear 2: Ceiling 3: Rear+Ceiling	Pn/F	
VXXS0308n	56h Xh Xh 53h 30h 33h 30h 38h nh 0Dh		0:Front 1:Rear 2: Ceiling 3: Rear+Ceiling	P/F	
VXXG0309	56h Xh Xh 47h 30h 33h 30h 39h 0Dh	Get vertical keystone value	n=-30~+30	Pn/F	
VXXS0309n	56h Xh Xh 53h 30h 33h 30h 39h nh 0Dh	Set vertical keystone value	n=-30~+30	P/F	
VXXG0310	56h Xh Xh 47h 30h 33h 31h 30h 0Dh	keystone value	n=-25~+25	Pn/F	
VXXS0310n	56h Xh Xh 53h 30h 33h 31h 30h nh 0Dh	Set horizontal keystone value	n=-25~+25	P/F	
VXXG0311	56h Xh Xh 47h 30h 33h 31h 31h 0Dh	Get the zoom	n=-10~+10	Pn/F	
VXXS0311n	56h Xh Xh 53h 30h 33h 31h 31h nh 0Dh	Adjust the zoom	n=-10~+10	P/F	
VXXG0312	56h Xh Xh 47h 30h 33h 31h 32h 0Dh	Get the focus	n=-20~+20	Pn/F	
VXXS0312n	56h Xh Xh 53h 30h 33h 31h 32h nh 0Dh		n=-20~+20	P/F	
VXXG0313	56h Xh Xh 47h 30h 33h 31h 33h 0Dh	Get the vertical lens shift	n=-20~+20	Pn/F	
VXXS0313n	56h Xh Xh 53h 30h 33h 31h 33h nh 0Dh	Adjust the vertical lens shift	n=-20~+20	P/F	
VXXG0314	56h Xh Xh 47h 30h 33h 31h 34h 0Dh	Get the horizontal lens shift	n=-20~+20	Pn/F	
	56h Xh Xh 53h 30h 33h 31h 34h nh 0Dh	nonzontai iens sniit	n=-20~+20	P/F	
VXXG0315	56h Xh Xh 47h 30h 33h 31h 35h 0Dh		n= 0~2	Pn/F	
VXXS0315n	56h Xh Xh 53h 30h 33h 31h 35h nh 0Dh	Adjust the 3D Mode	0:Off 1:DLP 2: IR	P/F	
VXXG0316	56h Xh Xh 47h 30h 33h 31h 36h 0Dh	Get the 3D sync inverter	n= 0~1	Pn/F	
VXXS0316n	56h Xh Xh 53h 30h 33h 31h 36h nh 0Dh	Adjust the 3D sync inverter	0:Off 1:On	P/F	
VXXG0317	56h Xh Xh 47h 30h 33h 31h 37h 0Dh		n= 0~3	P/F	
VXXS0317n	56h Xh Xh 53h 30h 33h 31h 37h nh 0Dh	Adjust the 3D	0:FS 1:TB 2:SBS 3:FP	Pn/F	

	Command Group 03				
ASCII	HEX	Function	Description	Return Value	
VXXG0319	56h Xh Xh 47h 30h 33h 31h 39h 0Dh	Adjust the Lamp mode	n= 0~2	Pn/F	
VXXS0319n	56h Xh Xh 53h 30h 33h 31h 39h nh 0Dh	Adjust the Lamp mode	0:Eco 1:Normal 2:Dynamic Eco	P/F	
VXXS0320	56h Xh Xh 53h 30h 33h 32h 30h 0Dh	Screen Capture		P/F	
VXXG0321	56h Xh Xh 47h 30h 33h 32h 31h 0Dh	Get Splash Logo	0:STD 1:Black 2:Blue	Pn/F	
VXXS0321n	56h Xh Xh 53h 30h 33h 32h 31h nh 0Dh	Set Splash Logo	0:STD 1:Black 2:Blue	P/F	
VXXG0322	56h Xh Xh 47h 30h 33h 32h 32h 0Dh	Get Fan Speed	n= 0~1	Pn/F	
VXXS0322n	56h Xh Xh 53h 30h 33h 32h 32h nh 0Dh	Set Fan Speed	0:Normal 1:High Speed	P/F	
VXXG0330	56h Xh Xh 47h 30h 33h 33h 30h 0Dh	Get Sleep Timer (min = n*5)	n= 0~120	Pn/F	
VXXS0330n	56h Xh Xh 53h 30h 33h 33h 30h nh 0Dh	Set Sleep Timer (min = n*5)	n= 0~120	P/F	