

DX5630 DW5650 DH5661 DU5671 Series User Manual 用戶手冊

用户手册

Manual del usuario

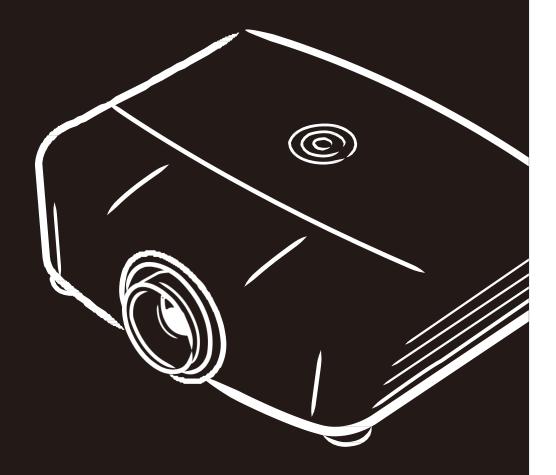
Manuel de l'utilisateur

Benutzerhandbuch

사용자 설명서

Руководство пользователя

Manuale d'uso





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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**

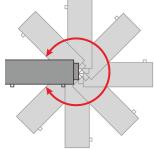
- > Do not open the unit case. Aside from the projection lamp, there are no user-serviceable parts in the unit. For servicing, contact qualified service personnel.
- Follow all warnings and cautions in this manual and on the unit case.
- > The projection lamp is extremely bright by design. To avoid damage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

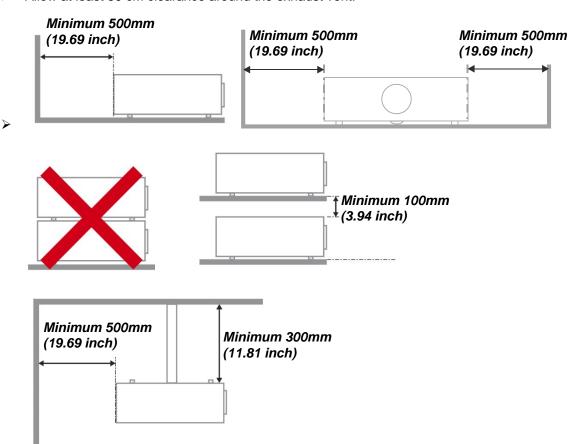
**Do not tilt the projector to the left or right**, otherwise lamp life could decrease dramatically, and may lead to other **unpredictable damages**.



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 58 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.



#### 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.

### Cleaning the Projector

- ➤ Unplug the power cord before cleaning. See *Cleaning the Projector* on page 64.
- 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 79.

### 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<sup>®</sup> and BrilliantColor<sup>™</sup> technologies from Texas Instruments.
- Centered lens for easy installation.
- Horizontal and vertical lens shift.
- 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.
- Built-in HDBaseT receiver. HDBaseT™ interface with support for distribution of HD video, digital audio content RS232, RJ45 and IR function over standard CAT5e/6 LAN cable

### About this Manual

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

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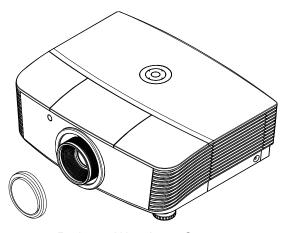
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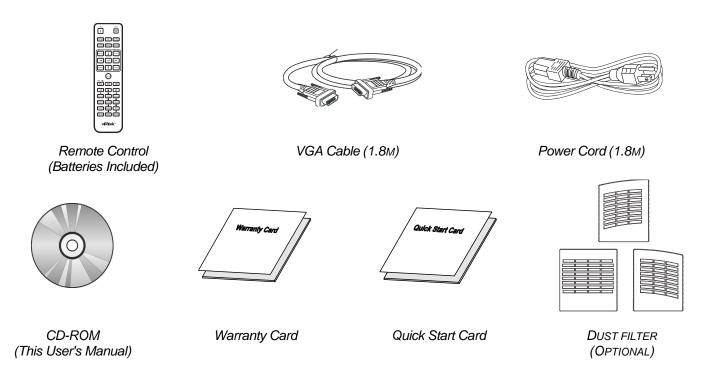
# **GETTING STARTED**

## **Packing Checklist**

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



Projector WITH LENS CAP



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.

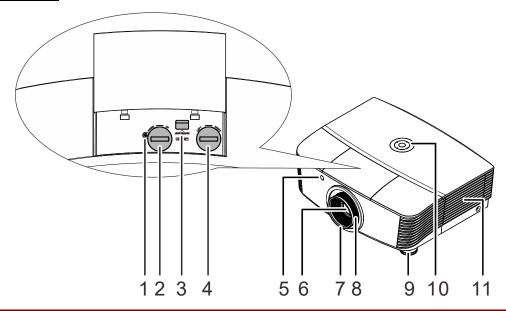


#### Caution:

Avoid using the projector in dusty environments.

### **Views of Projector Parts**

# Front-right View



Ітем	LABEL	DESCRIPTION	SEE PAGE:
1.	Screw	For ensure the lens position	
2.	Vertical lens shift	Adjusts the image position vertically	19
3.	Lens release button	Press the release button before removing the lens	12
4.	Horizontal lens shift	Adjusts the image position horizontally	21
5.	IR receiver	Receives IR signal from remote control	2
6.	Lens	Projection Lens	
7. Focus ring		Focuses the projected image	
8. Zoom ring		Enlarges the projected image	18
9.	Height adjuster	Adjusts level of projector	
10.	Function keys	See Top view—On-screen Display (OSD) buttons and LEDs.	
11.	Lamp cover	Removes cover to replace lamp module	



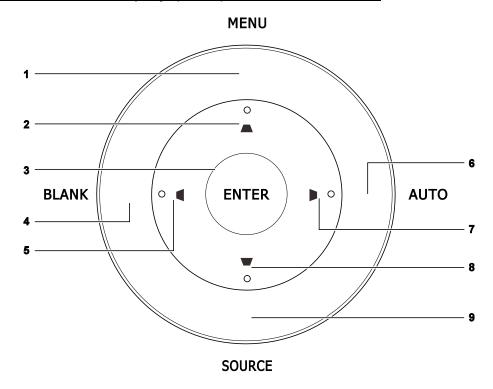
#### Important:

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

### Note:

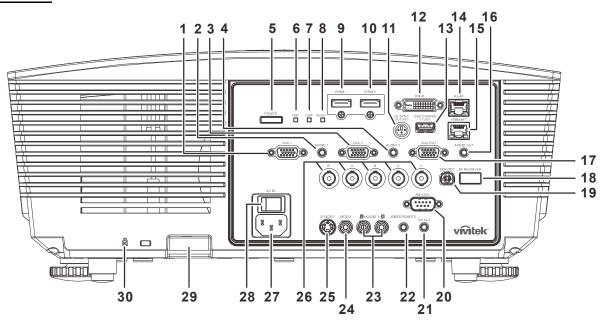
Suggest to loosen the screw before lens shift adjustment and tighten up after finished adjustment.

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



Ітем	LABEL	DESCRIPTION	SEE PAGE:
1.	MENU	Opens and exits OSD menus	
2.		Navigates and changes settings in the OSD Quick Menu – For Vertical Keystone	25
3.	ENTER	Enter or confirm highlighted OSD menu item	
4.	BLANK	Displays a blank screen and mutes audio	
5.	•	Navigates and changes settings in the OSD Quick Menu – For Horizontal Keystone	
6.	AUTO	Optimizes image size, position, and resolution	
7.	7. Navigates and changes settings in the OSD Quick Menu – For Horizontal Keystone		25
8.		Navigates and changes settings in the OSD Quick Menu – For Vertical Keystone	20
9.	SOURCE	Enter the Source menu	

### Rear view



Ітем	LABEL	DESCRIPTION SEE PAGE:			
1.	VGA1	Connect a RGB cable from a computer or a video enabled device.			
2.	AUDIO IN 1	Connect the	AUDIO cable from an input device.		
3.	VGA 2	Connect a R	GB cable from a computer or a video enable	d device.	
4.	AUDIO IN 2		AUDIO cable from an input device. with DVI & BNC audio input.		
5.	POWER		ojector on or off (main power switch must in first). Press to place the projector in de.	12	
		Red	Standby		
6.	PWR LED	Green	Lamp Ready		
			Start warm up, Cooling, Error code (See as LED indicator table)	67	
7.	TEMP LED	Red	Over temperature	-	
8.	READY LED	Red	Lamp Ready		
0.	READT LED	Flashing	Error code (See as LED indicator table)		
9.	HDMI 1	Connect the	HDMI cable from a HDMI device.		
10.	HDMI 2	Connect the HDMI cable from a HDMI device.			
11.	3D SYNC OUT (5V)	Connect 3D IR glasses receiver unit.			
12.	DVI-D	Connect the DVI cable from a computer.			
13.	USB CHARGE (1.5A)	For USB charge.			
14.	RJ-45	Connect a L	AN cable from Ethernet.		

İTEM	LABEL	DESCRIPTION	SEE PAGE:	
15.	HDBaseT(*)	Connect Cat5e/Cat6 cable from HDBaseT TX Box (VIDEO EXTENDER) for HDBaseT signal received.		
16.	AUDIO OUT	Connect an AUDIO cable for audio loop through.		
17.	VGA OUT	Connect the RGB cable to a display. (Pass through by VGA1 only)		
18.	IR receiver	Receive IR signal from remote control.	2	
19.	SERVICE	For service use.		
20.	RS-232	Connects RS-232 serial port cable for remote control.		
21.	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).		
22.	WIRED REMOTE	Wire remote control connector (connect with wire remote connector of the Remote Control set).		
23.	AUDIO IN 3 L/R RCA (Video/ S- Video)	Connect the audio cables from a audio device.		
24.	VIDEO	Connect the composite cable from a video device.		
25.	S-VIDEO	Connect the S-video cable from a video device.		
26.	BNC	Connect a BNC cable from a computer.		
27.	AC IN	Connects the power cable.		
28.	Power switch	Turns on/off the projector.		
29.	Security chain lock	Helps protect the projector from unauthorized use.		
30.	Kensington Security Slot	Secures to permanent object with a Kensington Lock system.	65	

### 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.



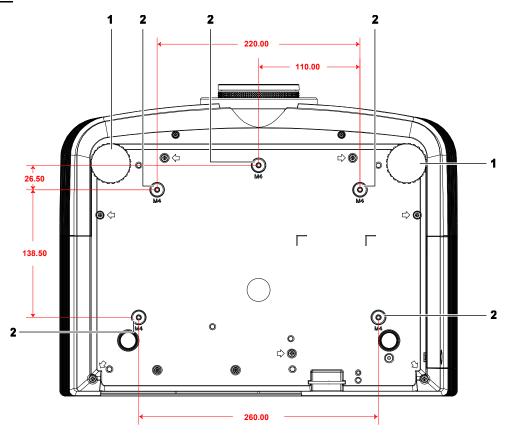
### Warning:

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

### Note:

(\*) Available in DU5671

### Bottom view



ITEM LABEL		DESCRIPTION	SEE PAGE:
1.	Tilt adjustor	Rotate adjuster lever to adjust angle position.	18
2.	Ceiling support holes	Contact your dealer for information on mounting the projector on a ceiling	

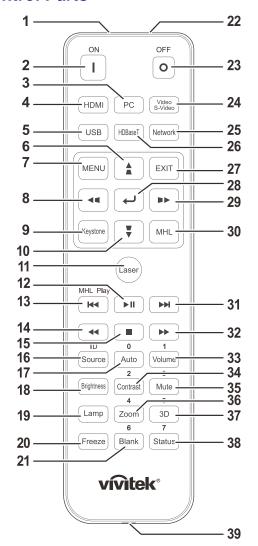
#### Note:

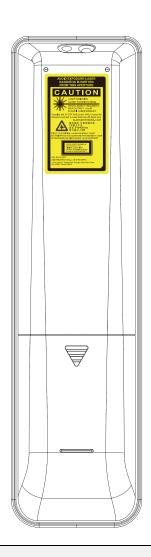
When installing, ensure that you use only UL Listed ceiling mounts.

For ceiling installations, use approved mounting hardware and M4 screws with a maximum screw depth of 12 mm (0.47 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 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.		
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.	25	
7.	MENU	Opens the OSD.	<b>25</b>	
8.	<b>◄</b> ■	Navigates and changes settings in the OSD. Quick Menu – For Horizontal Keystone.	25	
9.	Keystone	Opens the Keystone menu.		
10.	<b>*</b>	Navigates and changes settings in the OSD. Quick Menu – For Vertical Keystone.	25	
11.	Laser	Press to operate the on-screen pointer. DO NOT POINT I	N EYES.	
12.	▶II	NA		
13.	<b>I</b>	NA		
14.	<b>44</b>	NA		
15.		NA		
16.	Source/ID	Alternate input source. Combo key function for Remote Control customer code settings (Press ID button + Number for 3 seconds).	25	
17.	Auto/0	Auto adjustment for frequency, phase, and position. Number for Remote ID setting used.		
18.	Brightness	Displays the brightness setting bar.		
19.	Lamp	Displays the lamp selections.		
20.	Freeze	Freezes/unfreezes the on-screen picture.		
21.	Blank/6	Makes the screen blank. Number for Remote ID setting used.		
22.	Laser	Use as on-screen pointer. DO NOT POINT IN EYES.		
23.	Power Off	Turns the projector off.	12	
24.	Video/S-Video	Displays the VIDEO/S-VIDEO source selection.		
25.	Network	Displays the Network source selection.		
26.	HDBaseT(*)	Displays the HDBaseT source selection.		
27.	EXIT	Return to last OSD page.		
28.	<b>←</b>	Enters and confirms settings in the OSD.		
29.	<b>&gt;</b>	Navigates and changes settings in the OSD.  Quick Menu – For Horizontal Keystone.		
30.	MHL	NA .		
31.	<b>&gt;&gt;</b>	NA		
32.	<b>&gt;&gt;</b>	NA		

Ітем	Label	DESCRIPTION SEE PAG			
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 43.

### Note:

(\*) Available in DU5671

### **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.

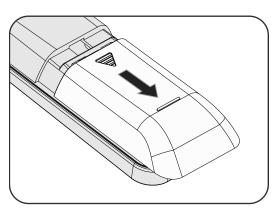
### **Projector and Remote Control Buttons**

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.

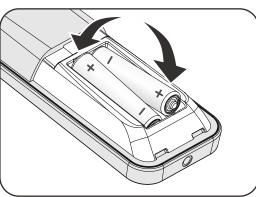
# **SETUP AND OPERATION**

## **Inserting the Remote Control Batteries**

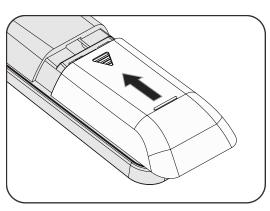
1. Remove the battery compartment cover by sliding the cover in the direction of the arrow.



**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.
- 4. RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.
- 5. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

### **Installing or Removing the Optional Lens**

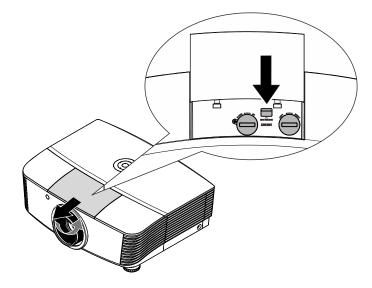


#### Caution:

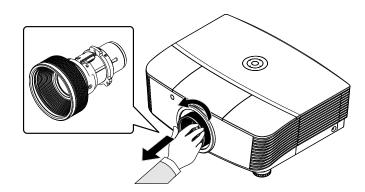
- Do not shake or place excessive pressure on the projector or the lens components as the projector and lens components contain precision parts.
- Before removing or installing the lens, be sure to turn off the projector, wait until the cooling fans stop, and turn off the main power switch.
- Do not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

### Removing the Existing Lens From the Projector

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



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



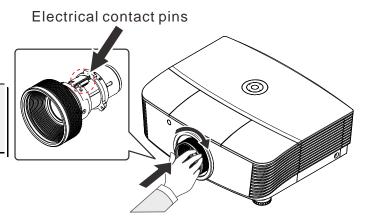
# Installing the New Lens

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

### Note:

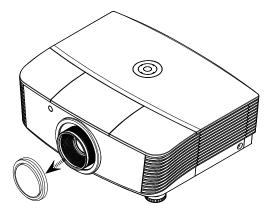
Pin of Electrical contact pins should be in the direction as shown in the picture.

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



### Starting and Shutting down the Projector

1 Remove the lens cap.

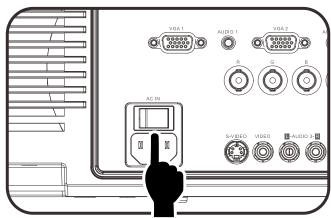


- 2. Securely connect the power cord and signal cable. When connected, the power led will turn red.
- Turn on the lamp by pressing "button on the rear of the projector or
  - "I" on the remote control.

    The PWR LED will now flash red.

    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 26)

See Setting an Access Password (Security Lock) on page 16 if security lock is enabled.





**4.** If more than one input device is connected, press the **SOURCE** button and use **▲** ▼ to scroll among devices.

(Component is supported through the RGB to Component adapter.)



- HDMI 1 / 2: High-Definition Multimedia Interface 1 / 2 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 DU5671)

#### Note:

It is recommended to use a certified TX box (VIDEO EXTENDER) – Rextron (EVBMN-110L38) for the HDBaseT function and there is no guarantee of full response when other brands of TX box are used. Using a single HDBaseT CAT5e cable, the projector supports an HDBaseT connection distances to 100m/328ft.

When the "Power Off? /Press Power again" message appears, press the POWER button. The projector turns off.





#### Caution:

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

### **Setting an Access Password (Security Lock)**

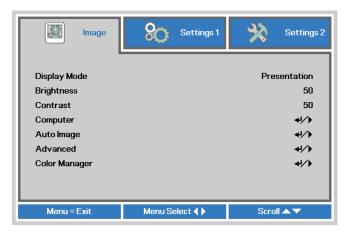
You can use the four (arrow) buttons to set a password and prevent unauthorized use of the projector. When enabled, the password must be entered after you power on the projector. (See *Navigating the OSD* on page 25 and *Setting the OSD Language* on page 26 for help on using OSD menus.)



#### 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</li>
▲ ▼ button to select Advanced 1.



- Press the cursor ◀► button to enter and enable or disable security lock function.

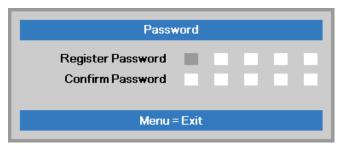
A password dialog box automatically appears.



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.

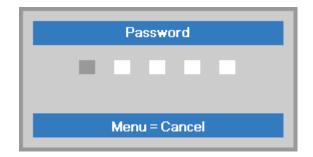
Press the cursor buttons in any order to set the password. Push the **MENU** button to exit the dialog box.





**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.

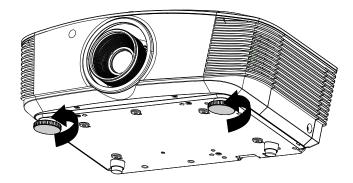
The service center will validate the owner and help reset the password.



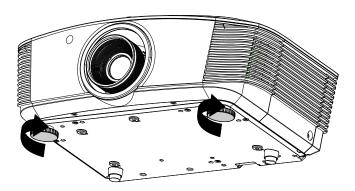
### **Adjusting the Projector Level**

Take note of the following when setting up the projector:

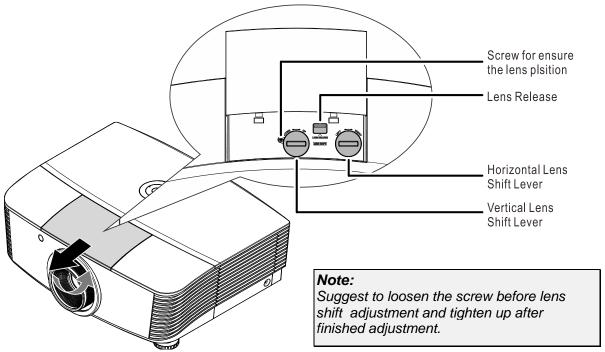
- The projector table or stand should be level and sturdy.
- Position the projector so that it is perpendicular to the screen.
- Remove the Back Foot Holder on the rear adjuster foot before adjusting the projection angle.
- Ensure the cables are in a safe location. You could trip over them.
- **1** To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



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



### **Adjusting Projected Image Position Using Shift**



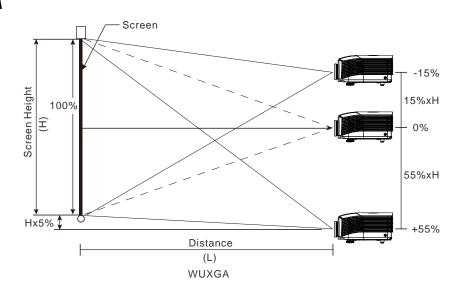
The Shift feature provides a lens shift function that can be used to adjust the position of the projected image either horizontally or vertically within the range detailed below.

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

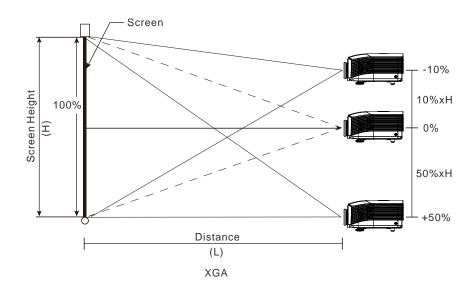
## Adjusting the vertical image position

The vertical image height can be adjusted between 55% and -15% (WUXGA), 50% and -10% (XGA), of offset position. Note that the maximum vertical image height adjustment can be limited by the horizontal image position. For example it is not possible to achieve the maximum vertical image position height detailed above if the horizontal image position is at maximum. Please consult the Shift Range diagram below for further clarification.

#### **WUXGA**

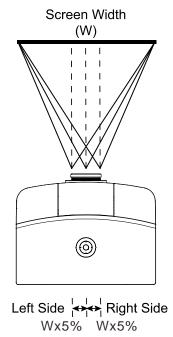


XGA



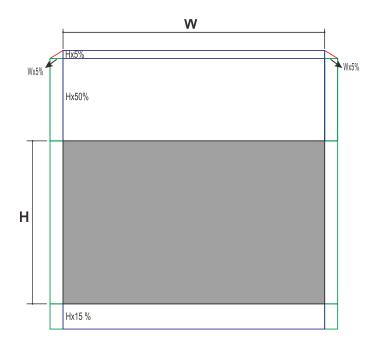
### Adjusting the horizontal image position

With the lens in the center position the horizontal image position can be adjusted to the left or right by up to a maximum of 5% 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. Please consult the Shift Range diagram below for further clarification.



### Shift Range Diagram

### **WUXGA**



When W and H at 0% offset position

The max. H up shift=Hx55%

The max. H down shift=Hx15%

The max. W shift=Wx5%

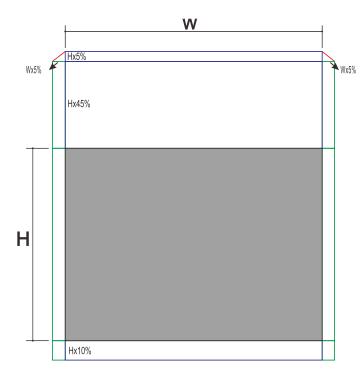
When max. W shift is Wx5%

max. H shift=Hx50%

When max. H shift is Hx55%

max. W shift=Hx0%

# XGA



When W and H at 0% offset position

The max. H up shift=Hx50%

The max. H down shift=Hx10%

The max. W shift=Wx5%

When max. W shift is Wx5%

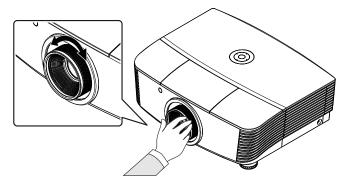
max. H shift=Hx45%

When max. H shift is Hx50%

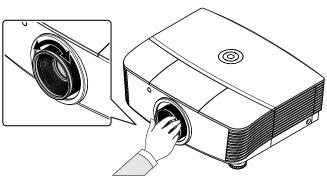
max. W shift=Hx0%

### Adjusting the Zoom, Focus and Keystone

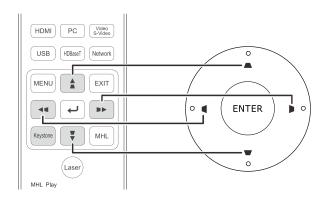
1 Use the **Image-zoom** control (on the projector only) to resize the projected image and screen size.



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



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

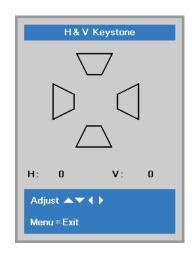


Remote control and OSD panel

**4.** The keystone control appears on the display.

Press / for V Keystone correcting image.

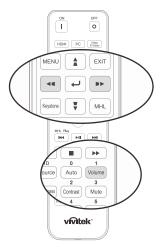
Press / For H Keystone correcting image.



### **Adjusting the Volume**

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

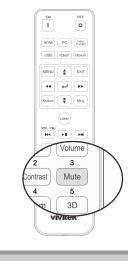
The volume control appears on the display.



**2.** Press the **◄** / **▶** buttons on the keypad to adjust **Volume +/-**.



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





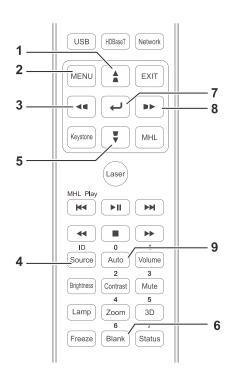
# ON-SCREEN DISPLAY (OSD) MENU SETTINGS

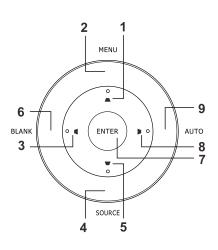
### **OSD Menu Controls**

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

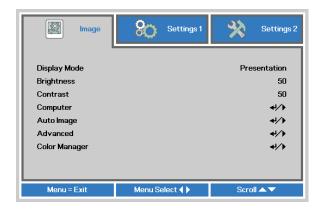
### Navigating the OSD

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



#### Note:

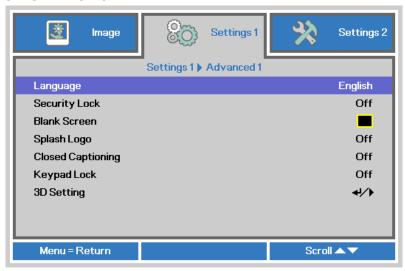
Depending on the video source, not all items in the OSD are available. For example, the **Horizontal/Vertical Position** items in the **Computer** menu can only be modified when connected to a PC. Items that are not available cannot be accessed and are grayed out.

### **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	Cub Manu			Cattings
Menu	Sub Menu			Settings
Image	Display Mode			Presentation, Bright, Game, Movie, Vivid, TV, sRGB, DICOM SIM, User1, User2
	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
		_ ·	L 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
		<sup>L</sup> 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
	Advanced 1	<sub>-</sub> Language		English, Français, Deutsch, Español, Português, 簡体中文, 繁體中文, Italiano, Norsk, Svenska, Nederlands, Русский, Polski, Suomi, Ελληνικά, 한국어, Magyar, Čeština, العربية, Türkçe, Việt, 日本語, ไทย, Dansk, Fran. Can.
		Security Lock		Off, On
		Blank Screen		Blank, Red, Green, Blue, White
		Splash Logo		Std., Black, Blue
		Closed Captioning	9	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, RGB Ramp, Color Bar, Step Bar, CheckBoard, Grid, Horizontal lines
		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
	No Signal Power Off			0~180
	Auto Power On			Off, On
	Lamp Mode			ECO , Normal
	Reset All			
	Status	Active Source		
		Video Information		
		Lamp Hours(ECO, Normal	)	
		Software Version		
		Remote ID		
		Serial Number		
	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
		LHDBaseT	HDBaseT	Off, On
			Front IR	On, Off
			Rear IR	On, Off
	Advanced 2	Sleep Timer		0~600
		Source Filter	_HDMI1	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

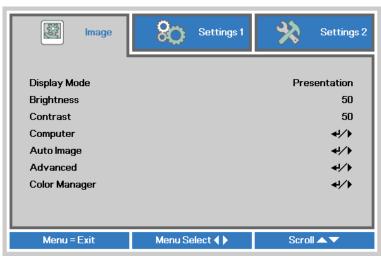
# **Image Menu**



#### Attention!

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

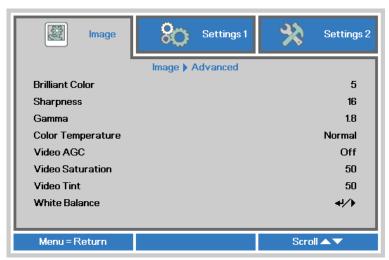
Press the **MENU** button to open the **OSD** menu. Press  $\blacktriangleleft \triangleright$  to move to the **Image** menu. Press  $\blacktriangle \blacktriangledown$  to move to the **Computer** menu and then press **Enter** or  $\triangleright$ . Press  $\blacktriangle \blacktriangledown$  to move 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 <b>ENTER</b> / ▶ button to enter the <b>White Balance</b> sub menu. See <i>White Balance</i> on page 33

# 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**

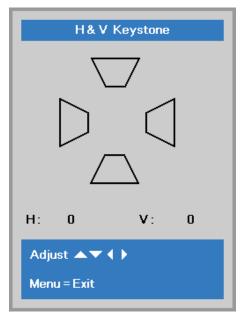
Press the **MENU** button to open the **OSD** menu. Press the cursor **◄►** button to move to the **Settings 1** menu. Press the cursor **▲▼** button to move up and down in the **Settings 1** menu. Press **◀►** to enter and change values for settings.



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.



Ітем	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.

# 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.
- 2. 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

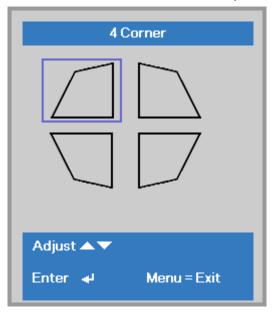
Press the **Menu** button to open the **OSD** menu. Press **◄** ► to move to the **Settings 1** menu. Press **▲** ▼ to move to the **Advanced 2** menu and then press **Enter** or ►. Press **▲** ▼ to move up and down in the **Advanced 2** menu. Press **◄** ► to enter and change values for setting.



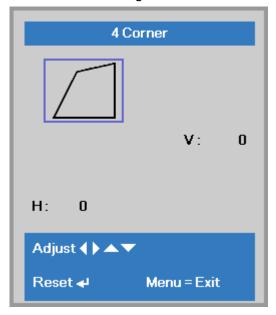
Ітем	DESCRIPTION
Test Pattern	Press the cursor ◀▶ button to enter and select internal test pattern.
H Image Shift	Press the cursor ◀▶ button to enter and select whole Image H shift without cropped.
V Image Shift	Press the cursor ◀▶ button to enter and select whole Image V shift without cropped.

# 4 Corner

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

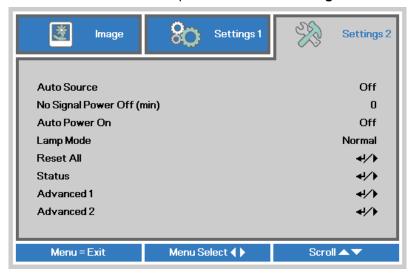


- 2. Press the cursor ▲ / ▼ buttons to adjust vertical and press the cursor ◀ / ▶ buttons to adjust horizontal.
- 3. Press **MENU** to save and Exit the settings.



## **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)
Software Version	Showing system software version.
Remote ID	Showing Remote Controller ID
Serial Number	Showing serial number of product.

## <u>Advanced 1 Feature</u>

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 44 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
HDBaseT	Press

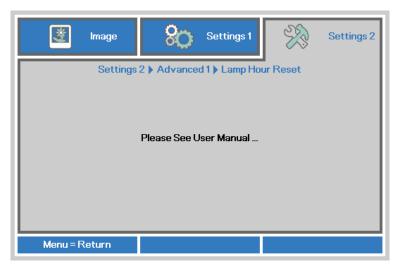
#### Note:

About "On By Lan", RJ45 will support to be waked up in this mode 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



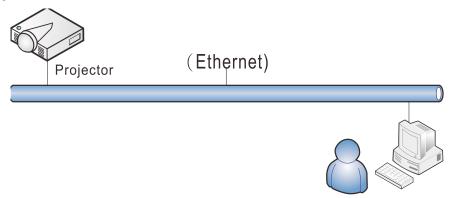
Please refer to Resetting the Lamp on page 61 to reset the lamp hour counter.

## 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.

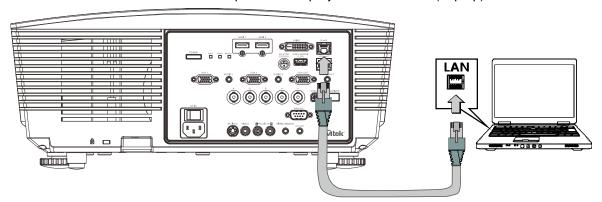
http://www.extron.com/

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

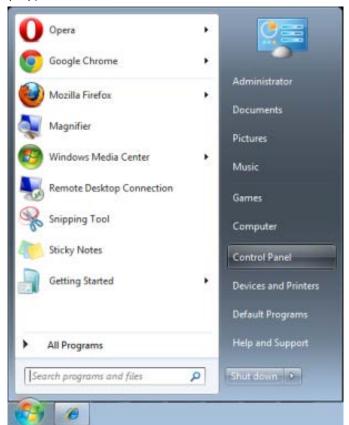
For more detail of information about the diverse types of external devices which can be connected to the LAN/RJ45 port and remote/control the projector, as well as the related control commands supporting for each external device, kindly please get contact with the Support-Service team directly.

## LAN\_RJ45

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

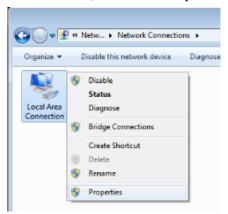


2. On the PC (Laptop), select Start  $\rightarrow$  Control Panel  $\rightarrow$ Network and Internet.

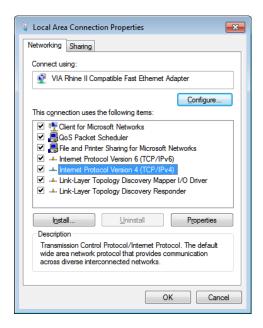




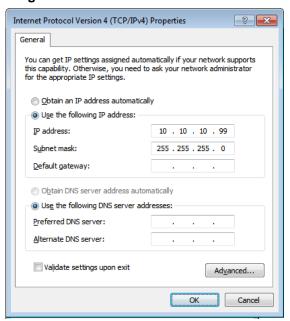
3. Right-click on Local Area Connection, and select Properties.



- 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

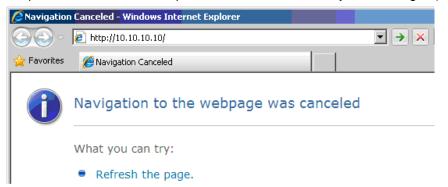
► IP Address: 10.10.10.10

► 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).

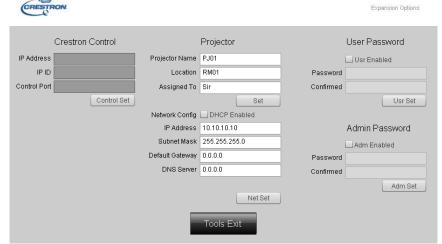


- 11. In the Address bar, input the IP address: 10.10.10.10.
- 12. Press **←** (Enter) / ►.

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







CATEGORY	Ітем	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 <a href="http://www.crestron.com">http://www.crestron.com</a>.

## **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 Mail Settings.



3. By default, these input boxes in Alert Mail 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

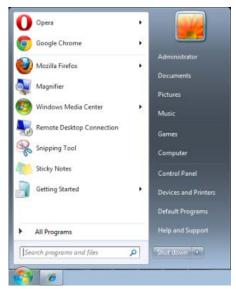
Besides projector connected to RS232 interface with "Hyper-Terminal" communication by dedicated RS232 command control, there is alternative RS232 command control way, so called "RS232 by TELNET" for LAN/RJ45 interface.

## 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.

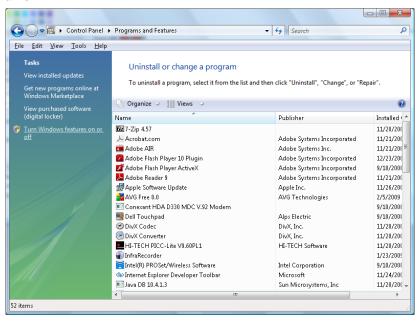
## How to have TELNET enabled in Windows 7/8/10

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

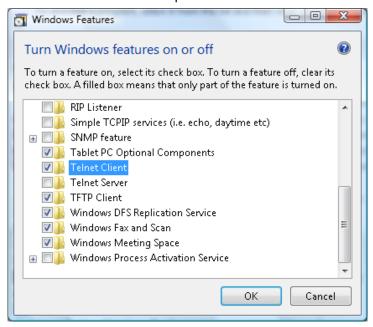
Open "Control Panel" in Windows



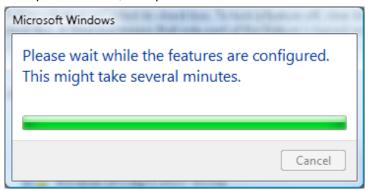
#### Open "Programs"



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.)

## **HDBaseT**



Ітем	DESCRIPTION
HDBaseT	Press the cursor ◀▶ button to enter and enable or disable HDBaseT Control.
Front IR	Press the cursor ◀▶ button to enter and enable or disable Front IR.
Rear IR	Press the cursor ◀▶ button to enter and enable or disable Rear IR.

#### Note:

- 1. Enable **HDBaseT control** function when you desire to use HDBaseT TX box. (Remove RS232 and RJ45/LAN control function from Projector to HDBaseT TX box.) See HDBaseT control function table.
- 2. When HDBaseT enable, Low Power Mode will auto set to On by HDBaseT.
- 3. HDBaseT control is disabled when the HDBaseT TX box signal is cutoff.

#### HDBaseT control function table

		Projector Mode			
Control Side	Function	Low Power Mode On(<0.5W)	Low Power Mode On by lan(<3W)	HDBaseT control Enable Low Power Mode On by HDBaseT(<6W)	Remark
	Front-IR(wireless)	0	0	O(Can disable by OSD)	
for	Rear-IR(wireless)	0	0	O(Can disable by OSD)	
Projector	RS-232	0	0	Х	
Pro	RJ45/LAN	Χ	0	Х	
	Wired remote	0	0	0	
	HDBT-IR(wireless)	Х	Х	0	
Вох	RS-232	Х	Х	0	
_ <u></u>	RJ45/LAN	Х	Х	0	
HDBaseT TX	Wired remote	Х	Х	0	User can connect wired remote at HDBaseT TX side to get the wired function.

O : Enable X : Disable

# 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

# Source Filter

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



Ітем	DESCRIPTION
HDMI1	Press the cursor ◀▶ button to enter and enable or disable the HDMI1 source.
HDMI2	Press the cursor ◀▶ button to enter and enable or disable the HDMl2 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 DU5671

# 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.



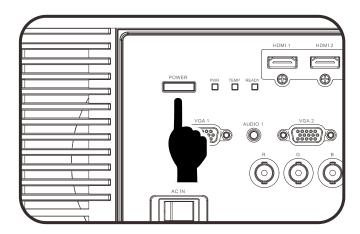
### IF A LAMP EXPLODES

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.

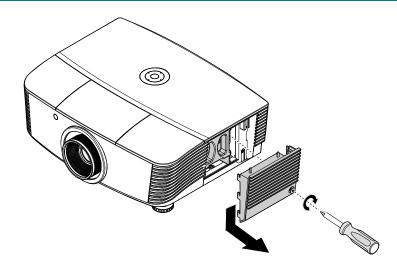
Open windows and doors for ventilation.

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

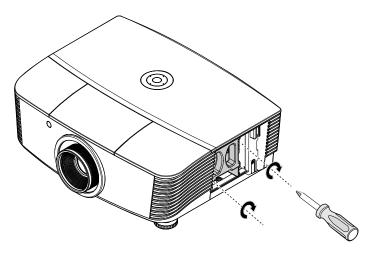
- Switch off the power to the projector by pressing the **POWER** button.
- 2. Allow the projector to cool down at least 30 minutes.
- **3.** Disconnect the power cord.



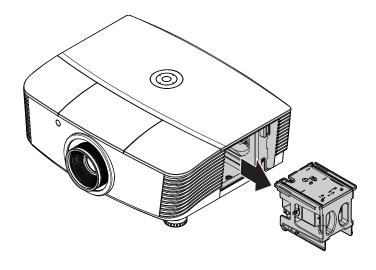
- **4.** Unlock the lamp cover.
- **5.** Pull up and remove the cover



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



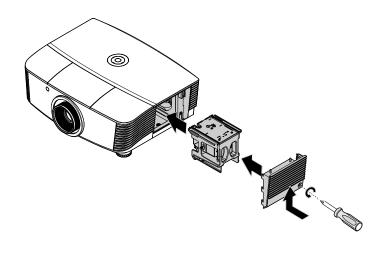
**7.** Pull out the lamp module.



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:

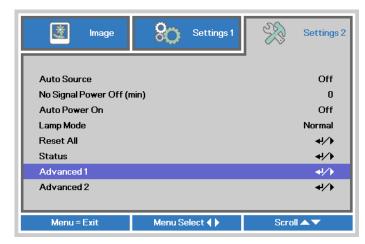
The lamp module must sit securely in place and the lamp connector must be connected properly before tightening the screws.



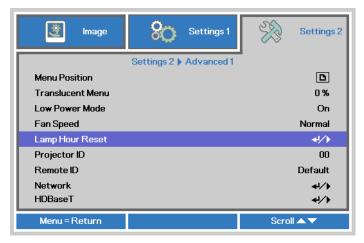
## Resetting the Lamp

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

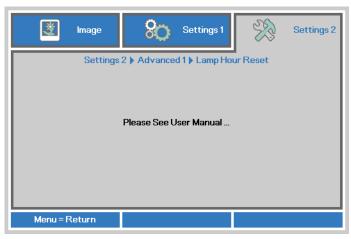
- 1. Press the **MENU** button to open the OSD menu.
- Press the cursor ◀► button to move to the Settings 2 menu. Press the cursor button to move down to Advanced 1 and press enter.



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



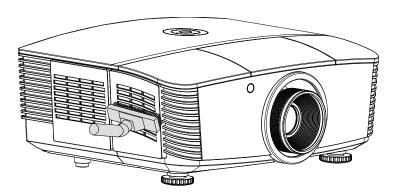
- **4.** Press the cursor ▶ or Enter button.
  - A message screen appears.
- **5.** Press **▼ ▲ ◆ ▶** buttons to reset the lamp hour.
- **6.** Press the **MENU** button to get back to **Settings 2**.



## Cleaning the filter (filter: optional parts)

The air filter prevents dust from accumulating on the surface of the optical elements inside the projector. If the filter is dirty or clogged, your projector may overheat or degrading the projected image quality.

- 1 Turn off the projector, and unplug the AC power cord from the AC outlet.
- 2. Cleaning the filter with a vacuum cleaner.





### Caution:

Recommend avoiding dusty or smoky environments when you operate the projector, it may cause poor image quality.

If the filter is heavily clogged and unable to clean, replace a new filter.

### Note:

Using a ladder is recommended to access the filter. Do not remove the projector from the wall mount.

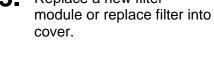
## **Replacing the Filter**

Turn off the projector, and unplug the AC power cord from the AC outlet. Clean up the dust on the projector and around the air vents.

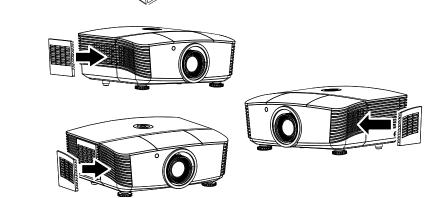
> Pull out the filter cover and remove from the projector

**2.** Lift the filter from the filter cover.

**3.** Replace a new filter



**4.** Replace the filter cover back to the projector by pushing gently in the direction shown.





### Warning:

Do not wash the filter with the water or other liquid matter



## Important:

When the lamp is replaced, the filter should also be replaced, not cleaned.

### **Cleaning the Projector**

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



#### Warning:

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

### Cleaning the Lens

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

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



#### Caution:

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

### Cleaning the Case

Refer to the following to clean the projector case.

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



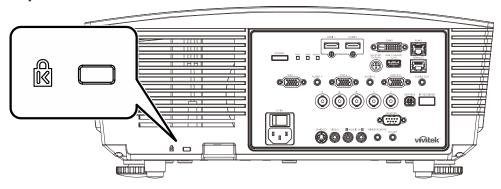
#### Caution:

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

### **Using the Physical Lock**

### Using the Kensington Security Slot

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



#### Note:

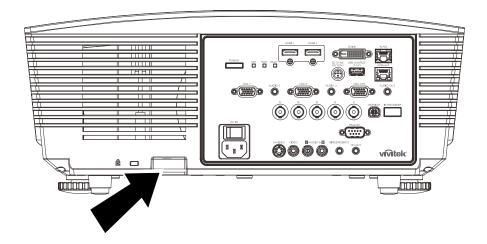
Contact your vendor for details on purchasing a suitable Kensington security cable.

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, <a href="http://www.Kensington.com">http://www.Kensington.com</a>.

### 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	TEMP LED	READY LED
Standby	Red	OFF	OFF
Start warm up	Flashing(Red)	OFF	OFF
Lamp Ready	Green	OFF	ON
Cooling	Flashing(Red)	OFF	OFF
Over Temperature	OFF	ON	OFF
Thermal Break Sensor error	4 blinks	OFF	OFF
Lamp strike fail / ballast connector open	5 blinks	OFF	OFF
Lamp voltage too low	5 blinks	OFF	7 blinks
Ballast fail	5 blinks	OFF	8 blinks
Ballast communication fail	5 blinks	OFF	10 blinks
Ballast over temp	5 blinks	OFF	11 blinks
Lamp fail	5 blinks	OFF	14 blinks
Fan 1 error	6 blinks	OFF	1 blinks
Fan 2 error	6 blinks	OFF	2 blinks
Fan 3 error	6 blinks	OFF	3 blinks
Fan 4 error	6 blinks	OFF	4 blinks
Fan 5 error	6 blinks	OFF	5 blinks
Fan 6 error	6 blinks	OFF	6 blinks
Fan 7 error	6 blinks	OFF	7 blinks
Case Open	7 blinks	OFF	OFF
DMD error	8 blinks	OFF	OFF
T1 error	8 blinks	OFF	1 blinks
T2 error	8 blinks	OFF	2 blinks
Color wheel error	9 blinks	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 Ready LEDs are still blinking or any other situation that isn't listed in the chart above, please 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.
- 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 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 battery.
- 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.

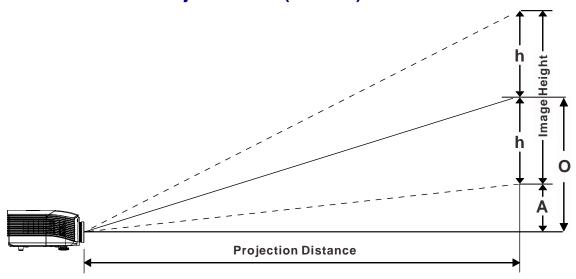
For more detail information check http://www.hdmi.org/learningcenter/faq.aspx#49

# **SPECIFICATIONS**

# **Specifications**

Model		DX5630	DU5671						
Display type		0.7 XGA, S600 HB	0.67 WUXGA, S600 HB						
Resolution		1024x768	1920x1200						
Projection dis	tance	1.5 meters	~ 7 meters						
Projection scr	een size	36.9" - 215.3"	35.1" - 205.3"						
Projection len	S	Manual Focus	/Manual Zoom						
Throw ratio		1.6 ~ 2.0	1.54 ~ 1.93						
keystone	Vertical	±30° for ±	-30 steps						
correction	Horizontal	±25° for ±	-25 steps						
Projection me	thods	Front, Rear, Desktop	/Ceiling (Rear, Front)						
Data compatik	oility	VGA, SVGA, XGA, SXGA, SXGA	VGA, SVGA, XGA, SXGA, SXGA+, UXGA, WUXGA@60hz, Mac						
SDTV/EDTV/ F	IDTV	480i, 576i, 480p, 576p	o, 720p, 1080i, 1080p						
Video compat	ibility	NTSC (M, 3.58/4.43 MHz), PAL (B, D, G	, H, I, M, N), SECAM (B, D, G, K, K1, L)						
H-Sync		15, 31-9	91.4kHz						
V-Sync		24~30Hz, 4	17 ~ 120Hz						
Safety certification	ation	FCC-B, cUL, UL, CE, C-tick, CC	CC, KC, CB, PCT, CECP, BSMI						
Operation tem	perature	5° ~ 4	40°C						
Environmenta Condition	l Storage	-10° ~ 60°C, 5% to 95	% (No condensation)						
Dimensions		431.11mm (W) x 344.16	mm (D) x 180.57mm (H)						
AC Input		AC Universal 100 – 240V							
Power consun	nption	Typical 540W(normal), Typical 410W(E	CO), <0.5W(Standby), <2W(on by Lan)						
Lamp		430W (Normal) / 320W (Eco)							
Audio speake	r	3W x 1							
		VGA	x 2						
		DVI-I	O x 1						
		S-Vide	eo x 1						
		5 BNC (RC	GBHV) x 1						
Input Termina	ls	Composite	video x 1						
		HDM	II x 2						
		RCA ste	ereo x 1						
		Mini-jack	stereo x 2						
		-	HDBaseT x 1						
		VGA							
Output Termir	nals	PC audio							
		3D s	-						
		RS-2							
		RJ							
Control Termi	nals	Screen trigger: DC Jack x 1 (D	, ,						
		wire re							
		USB (type B) c	-						
		USB (type A) only for							
Security		Kensington S	Security Slot						

## **Projection Distance vs. Projection Size (WUXGA)**



## Projection Distance and Size Table

Standard projection lens: TR: 1.54 ~ 1.93; offset=55%

		TELE				WIDE			
Distance (m)	1.66	3.33	4.16	8.31	1.66	3.32	6.63	9.95	
Diagonal (")	40	80	100	200	50	100	200	300(*)	
Image Width (mm)	862	1723	2154	4308	1077	2154	4308	6462	
Image Height (mm)	538	1077	1346	2692	673	1346	2692	4039	
h (mm)	269	538	673	1346	337	673	1346	2019	
O (mm)	296	592	740	1481	370	740	1481	2221	
A (mm)	27	54	67	135	34	67	135	202	

#### Note:

(\*) Overdrive.

## Long throw projection lens: TR: 1.93 ~ 2.9; offset=55%

		Te	LE		WIDE			
Distance (m)	2.5	6.25	12.49	18.74	2.08	6.24	12.47	18.71
Diagonal (")	40	100	200	300	50	150	300	450
Image Width (mm)	862	2154	4308	6462	1077	3231	6462	9693
Image Height (mm)	538	1346	2692	4039	673	2019	4039	6058
h (mm)	269	673	1346	2019	337	1010	2020	3029
O (mm)	296	740	1481	2221	370	1111	2222	3332
A (mm)	27	67	135	202	34	101	202	303

## New Short throw projection lens: TR: 0.778; offset=55%

	Fix						
Distance (m)	0.67	1.34	1.68	2.51			
Diagonal (")	40	80	100	150			
Image Width (mm)	862	1723	2154	3231			
Image Height (mm)	538	1077	1346	2019			
h (mm)	269	538	673	1010			
O (mm)	296	592	740	1111			
A (mm)	27	54	67	101			

## Semi Short throw projection lens: TR: 1.1 ~ 1.3; offset=55%

		TELE				WIDE			
Distance (m)	1.12	2.80	5.60	8.96	1.18	3.55	7.11	9.00	
Diagonal (")	40	100	200	320	50	150	300	380	
Image Width (mm)	862	2154	4308	6893	1077	3231	6462	8185	
Image Height (mm)	538	1346	2692	4308	673	2019	4039	5116	
h (mm)	269	673	1346	2154	337	1010	2019	2558	
O (mm)	296	740	1481	2369	370	1111	2221	2814	
A (mm)	27	67	135	215	34	101	202	256	

## Super Long throw projection lens: TR: 3 ~ 5; offset=55%

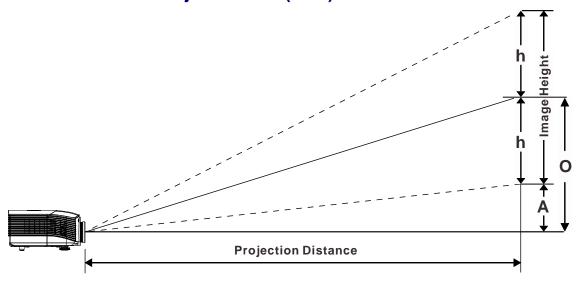
		TELE				WIDE			
Distance (m)	3.23	10.77	16.15	19.92	3.23	6.46	12.92	20.03	
Diagonal (")	30	100	150	185	50	100	200	310	
Image Width (mm)	646	2154	3231	3985	1077	2154	4308	6677	
Image Height (mm)	404	1346	2019	2490	673	1346	2692	4173	
h (mm)	202	673	1010	1245	337	673	1346	2087	
O (mm)	222	740	1111	1370	370	740	1481	2295	
A (mm)	20	67	101	125	34	67	135	209	

offset % =  $O/(2xh) \times 100\%$ 

O=A+h

 $h=(1/2) \times (image height)$ 

## **Projection Distance vs. Projection Size (XGA)**



## Projection Distance and Size Table

Standard projection lens: TR: 1.6 ~ 2; offset=50%

		TELE				WIDE			
Distance (m)	1.63	3.25	4.06	8.13	1.63	3.25	6.50	9.75	
Diagonal (")	40	80	100	200	50	100	200	300(*)	
Image Width (mm)	813	1626	2032	4064	1016	2032	4064	6096	
Image Height (mm)	610	1219	1524	3048	762	1524	3048	4572	
h (mm)	305	610	762	1524	381	762	1524	2286	
O (mm)	305	610	762	1524	381	762	1524	2286	
A (mm)	0	0	0	0	0	0	0	0	

#### Note:

(\*) Overdrive.

## Long throw projection lens: TR: 2~ 3; offset=50%

		Te	LE		WIDE			
Distance (m)	2.44	6.10	12.19	18.29	2.03	6.10	12.19	18.29
Diagonal (")	40	100	200	300	50	150	300	450
Image Width (mm)	813	2032	4064	6096	1016	3048	6096	9144
Image Height (mm)	610	1524	3048	4572	762	2286	4572	6858
h (mm)	305	762	1524	2286	381	1143	2286	3429
O (mm)	305	762	1524	2286	381	1143	2286	3429
A (mm)	0	0	0	0	0	0	0	0

## New Short throw projection lens: TR: 0.81; offset=50%

	Fix							
Distance (m)	0.66	1.32	1.65	2.47				
Diagonal (")	40	80	100	150				
Image Width (mm)	813	1626	2032	3048				
Image Height (mm)	610	1219	1524	2286				
h (mm)	305	610	762	1143				
O (mm)	305	610	762	1143				
A (mm)	0	0	0	0				

## Semi Short throw projection lens: TR: 1.14 ~ 1.34; offset=50%

		TELE				WIDE			
Distance (m)	1.09	2.72	5.45	8.99	1.16	3.47	6.95	9.03	
Diagonal (")	40	100	200	330	50	150	300	390	
Image Width (mm)	813	2032	4064	6706	1016	3048	6096	7925	
Image Height (mm)	610	1524	3048	5029	762	2286	4572	5944	
h (mm)	305	762	1524	2515	381	1143	2286	2972	
O (mm)	305	762	1524	2515	381	1143	2286	2972	
A (mm)	0	0	0	0	0	0	0	0	

## Super Long throw projection lens: TR: 3.11 ~ 5.18; offset=50%

		TELE				WIDE			
Distance (m)	3.16	10.53	15.79	20.00	3.16	6.32	12.64	19.91	
Diagonal (")	30	100	150	190	50	100	200	315	
Image Width (mm)	610	2032	3048	3861	1016	2032	4064	6401	
Image Height (mm)	457	1524	2286	2896	762	1524	3048	4801	
h (mm)	229	762	1143	1448	381	762	1524	2400	
O (mm)	229	762	1143	1448	381	762	1524	2400	
A (mm)	0	0	0	0	0	0	0	0	

offset % =  $O/(2xh) \times 100\%$ 

O=A+h

 $h=(1/2) \times (image height)$ 

## **Timing Mode Table**

Signal	Resolution	H-Sync (KHz)	V-Sync (Hz)	Composite S-Video	Component	RGB (Analog)	DP/DVI HDMI (Digital)
NTSC	_	15.7	60.0	0	_	_	_
PAL/SECAM	_	15.6	50.0	0	_	_	_
	640 x 400	37.9	85.1	_	_	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 576	35.8	60.0	_	_	0	0
	1024 x 600	37.3	60.0	_	_	0	0
	1024 x 600	41.5	65.0	_	_	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
VESA	1024 x 768	97.6	120.0	_	_	0	0
VLSA	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
	1280 x 720	90.0	120.0	_	_	0	0
	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
	1360 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

Signal	Resolution	H-Sync (KHz)	V-Sync (Hz)	Composite S-Video	Component	RGB (Analog)	DP/DVI HDMI (Digital)
	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
	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
SDTV	480i	15.7	60.0	_	0	_	0
SDIV	576i	15.6	50.0	_	0		0
EDTV	576p	31.3	50.0	_	0	_	0
EDIA	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

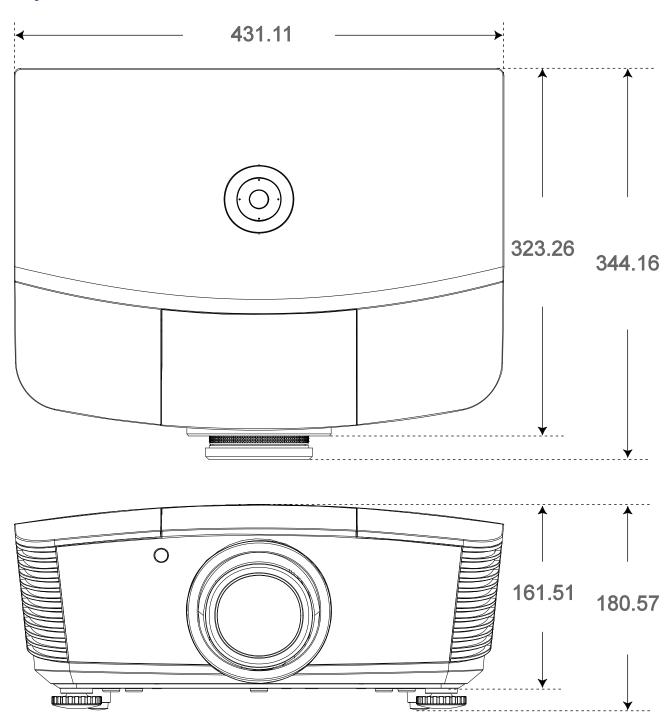
#### O: Frequency supported

—: Frequency not supported

Resolution others than native resolution may be display with uneven size of text or line.

- ★ 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, CE, C-tick, CCC, KC, CB, PCT, CECP, BSMI

## **APPENDIX** I

# **Communication parameter setup**

You can use the serial control command to input commands for projector control or retrieve its operational data through Windows client terminal software,

e.g. Hyper Terminal, with ASCII characters. You need to set up the following communication parameters in advance:

Item	Parameter:
Bit per Second	9600 bps
Data Bit	8-bit
Parity	None
Stop Bit	1
Flow Control	None

OSD Function	Operation command	Settings/Return Values	Note
Picture Mode	pic.mode	? 0:Presentation = 1:Bright 2:Game 3:Movie 4:Vivid 5:TV 6:sRGB 8:DICOM SIM 9:User1 10:User2	Not applicable when the project is in standby mode.
Input Select	input.sel	? 1 = VGA1 = 2 = VGA2 3 = DVI 4 = Video 5 = S-Video 6 = HDMI 1 7 = BNC 9 = HDMI 2 15 = HDBASET	Not applicable when the project is at below status. *Standby mode
Auto Power Off	auto.powoff	? 0-180	Not applicable when the project is in standby mode
Auto Power On	auto.powon	? 0 = Off = 1 = On	standby mode  Not applicable when the project is in standby mode
Blank Screen	no.signal	? 0 = Black = 1 = Red 2 = Green 3 = Blue 4 = White	Not applicable when the project is in standby mode
Contrast	contrast	? 0-100 = + -	Not applicable when the project is in standby mode or the input signal is not locked yet.
Brightness	bright	? 0-100 = + -	Not applicable when the project is in standby mode or the input signal is not locked yet.
Saturation	saturat	? 0-100 = + 	a. Apply for YUV signal input b. Not applicable when the project is in standby mode or the input signal is not locked yet.

OSD Function	Operation command		Settings/Return Values	Note
Hue	tint	? = + -	0-100	a. Apply for YUV signal input     b. Not applicable when the project     is in standby mode or the input     signal is not locked yet.  Not applicable when the project is in
Sharpness	sharp	? = + -	0-31	standby mode or the input signal is not locked yet.
Color Temperature	color.temp	?	0 = Warm 1 = Normal 2 = Cold	Not applicable when the project is in standby mode or the input signal is not locked yet.
White Balance /Red Offset	red.offset	? = + -	-100 ~ +100	Not applicable when the project is in standby mode or the input signal is not locked yet.
White Balance /Green Offset	green.offset	? = + -	-100 ~ +100	Not applicable when the project is in standby mode or the input signal is not locked yet.
White Balance /Blue Offset	blue.offset	? = + -	-100 ~ +100	Not applicable when the project is in standby mode or the input signal is not locked yet.
White Balance /Red Gain	red.gain	? = + -	0-200	Not applicable when the project is in standby mode or the input signal is not locked yet.
White Balance /Green Gain	green.gain	? = + -	0-200	Not applicable when the project is in standby mode or the input signal is not locked yet.
White Balance /Blue Gain	blue.gain	? = + -	0-200	Not applicable when the project is in standby mode or the input signal is not locked yet.
HSG/Red Gain	hsg.r.gain	? = + -	0-100	Not applicable when the project is in standby mode or the input signal is not locked yet.
HSG/Green Gain	hsg.g.gain	? = + -	0-100	Not applicable when the project is in standby mode or the input signal is not locked yet.
HSG/Blue Gain	Hsg.b.gain	? = + -	0-100	Not applicable when the project is in standby mode or the input signal is not locked yet.
HSG/Cyan Gain	hsg.c.gain	? = + -	0-100	Not applicable when the project is in standby mode or the input signal is not locked yet.
HSG/Magenta Gain	hsg.m.gain	? = +	0-100	Not applicable when the project is in standby mode or the input signal is not locked yet.
HSG/Yellow Gain	hsg.y.gain	? = + -	0-100	Not applicable when the project is in standby mode or the input signal is not locked yet.
HSG/Red/Saturation	hsg.r.sat	? = + -	0-100	Not applicable when the project is in standby mode or the input signal is not locked yet.
HSG/Green/Saturation	hsg.g.sat	? = + -	0-100	Not applicable when the project is in standby mode or the input signal is not locked yet.

OSD Function	Operation command	5	Settings/Return Values	Note
HSG/Blue/Saturation	Hsg.b.sat	? = + -	0-100	Not applicable when the project is in standby mode or the input signal is not locked yet.
HSG/Cyan/Saturation	hsg.c.sat	? = + -	0-100	Not applicable when the project is in standby mode or the input signal is not locked yet.
HSG/Magenta/Saturation	hsg.m.sat	? = +	0-100	Not applicable when the project is in standby mode or the input signal is not locked yet.
HSG/Yellow/Saturation	Hsg.y.sat	? = +	0-100	Not applicable when the project is in standby mode or the input signal is not locked yet.
HSG/Red/Hue	hsg.r.hue	? = +	0-100	Not applicable when the project is in standby mode or the input signal is not locked yet.
HSG/Green/Hue	hsg.g.hue	? = +	0-100	Not applicable when the project is in standby mode or the input signal is not locked yet.
HSG/Blue/Hue	Hsg.b. hue	? = +	0-100	Not applicable when the project is in standby mode or the input signal is not locked yet.
HSG/Cyan/Hue	hsg.c. hue	? = + -	0-100	Not applicable when the project is in standby mode or the input signal is not locked yet.
HSG/Magenta/Hue	hsg.m. hue	? = +	0-100	Not applicable when the project is in standby mode or the input signal is not locked yet.
HSG/Yellow/Hue	Hsg.y. hue	? = +	0-100	Not applicable when the project is in standby mode or the input signal is not locked yet.
HSG/White/Red Gain	hsg.wr.gain	? = +	0-100	Not applicable when the project is in standby mode or the input signal is not locked yet.
HSG/White/Green Gain	hsg.wg.gain	? = +	0-100	Not applicable when the project is in standby mode or the input signal is not locked yet.
HSG/White/Blue Gain	Hsg.wb.gain	? = +	0-100	Not applicable when the project is in standby mode or the input signal is not locked yet.
Aspect Ratio	aspect	? =	0 = Fill 1 = 4:3 2 = 16:9 3 = LetterBox 4 = Native 5 = 2.35:1	*Not applicable when the project is in standby mode or the input signal is not locked yet. *When the Zoom function is set to Zoom in, the Unscaled function is disabled.
VGA Frequency	h.phase	? = + -	0-31	*Not applicable when the project is in standby mode or the input signal is not locked yet. *Apply for VGA and Component signal input.

OSD Function	Operation command	5	Settings/Return Values	Note
VGA Tracking	h.total	? = + -	-5 ~ +5	*Not applicable when the project is in standby mode or the input signal is not locked yet. *Apply for VGA and Component signal input.
VGA H Position	h.pos	? + -	-5 ~ +5 -100 ~ +100(Auto Sync Off)	*Not applicable when the project is in standby mode or the input signal is not locked yet. *Apply for VGA and Component signal input.
VGA V Position	v.pos	? = + -	-5 ~ +5 -100 ~ +100(Auto Sync Off)	*Not applicable when the project is in standby mode or the input signal is not locked yet.  *Apply for VGA and Component signal input.
Auto Sync	auto.img		(execute)	Not applicable when the project is in standby mode or the input signal is not locked yet.
Zoom	zoom	?	-10 ~ +10	The Lens control command does not apply when the projector is in standby mode.
Lamp Mode	Lamp.mode	?	0 = Normal 1 = Eco	*Not applicable when the project is in standby mode  *Not applicable when the project is in cooling or lighting up status.  Please send control command after the said commands are completed.
Fan Speed	altitude	?	0 = Normal 1 = High	Not applicable when the project is in standby mode
Lamp 1 Statu	lamp1.stat	?	0 = Off 1 = On	Not applicable in standby mode
Projection Mode	proj.mode	?	0 = Desktop Front 1 = Desktop Rear 2 = Ceiling Front 3 = Ceiling Rear	Not applicable when the project is in standby mode
Gamma	gamma	?	0 = 1.8 1 = 2.0 2 = 2.2 3 = 2.4 4 = B&W 5 = Linear	Not applicable when the project is in standby mode or the input signal is not locked yet.
Test Pattern	pattern	?	0 = None 1 = RGB Ramps 2 = Color Bars 3 = Setp Bars 4 = Checkboard 5 = Grid 6 = Horizontal Lines	Not applicable when the project is in standby mode.
V Keystone	v.keystone	? = +	-30 ~ 30	Not applicable when the projector is in standby mode.
H Keystone	h.keystone	? = + -	-25 ~ 25	Not applicable when the projector is in standby mode.
Network/IP Adress	net.ipaddr	?	<string></string>	Not applicable when the project is in standby mode
Network/Subnet	net.subnet	?	<string></string>	Not applicable when the project is in standby mode
Network/Gateway	net.gateway	?	<string></string>	Not applicable when the project is in standby mode
Network/DHCP	net.dhcp	?	0 = Off 1 = On	Not applicable when the project is in standby mode
Menu Position	menu.pos	?	0 ~ 4	Not applicable when the project is in standby mode

	Operation			
OSD Function	Operation command	5	Settings/Return Values	Note
Startup Logo	startup.logo	?	0 = STD	Not applicable when the project is in
		=	1 = Black	standby mode
Auto Search	outo oro	2	2 = Blue 0 = Off	Not applicable when the prejector is
Auto Search	auto.src	?	1 = On	Not applicable when the projector is in standby mode.
Language	lang	?	0 = English	in standby mode.
Language	larig	l <u> </u>	1 = French	
			2 = German	
			3 = Spanish	
			4 = Portugues	
			5 = Simplified Chinese 6 = Traditional Chinese	
			7 = Italian	
			8 = Norwegian	
			9 = Swedish	
			10 = Dutch	
			11 = Russian 12 = Polish	
			13 = Finnish	
			14 = Greek	
			15 = Korean	
			16 = Hungarian	
			17 = Czech 18 = Arabic	
			19 = Turkish	
			20 = Vietnamese	
			21 = Japanese	
			22 = Thai	
			23 = Farsi 24 = Hebrew	
			25 = Danish	
			26 = French Canadian	
Model	model	?	<string></string>	
Serial Number Software Version	ser.no	?	<string></string>	
Active Source	sw.ver Act.src	?	<string> 1 = VGA1</string>	
Active Source	ACLSIC	ľ	2 = VGA2	
			3 = DVI	
			4 = Video	
			5 = S-Video	
			6 = HDMI 1 7 = BNC	
			9 = HDMI 2	
			15 = HDBASET	
Pixel Clock	pixel.clock	?	<string></string>	*In unit of MHz
				*Not applicable when the project is
				in standby mode or the input signal is not locked yet.
Signal Format	signal	?	<string></string>	Not applicable when the project is in
eignai i eimai	Joigi ia.	-	10gs	standby mode or the input signal is
				not locked yet.
H Refresh Rate	h.refresh	?	<string></string>	Not applicable when the project is in
				standby mode or the input signal is not locked yet.
V Refresh Rate	v.refresh	?	<string></string>	Not applicable when the project is in
V Honoon Hato	V.110110011	-	(Sunig)	standby mode or the input signal is
				not locked yet.
Lamp1.Time	lamp1.hours	?	<string></string>	
Lamp1 Time Reset	Lamp1.reset		(execute)	Reset All of lamp time
Power On Time	proj.runtime	?	<string></string>	
Factory Reset	fact.reset		(execute)	
Blank	Picture.mute	?	0 = Off 1 = On	
Power On	power.on	F	(execute)	Not applicable in active mode
Power Off	power.off		(execute)	Not applicable in standby mode
. 546. 511	P01101.011	1	(CASOCIO)	1 101 applicable in stallaby filede

OSD Function	Operation command	5	Settings/Return Values	Note
Projector Status	status	?	0 = Reset 1 = Standby 2 = Active 3 = cooling	
Low Power Mode	lowpower.mod e	? =	0 = Off 1 = On 2 = On By Lan	
3D Sync	threed.mode	? =	0 = Off 1 = DLP-Link 2 = IR	Auto 3D (1080P 24Hz) can not Off
3D Sync Invert	threed.sync.in vert	?	0 = Off 1 = On	Active in DLP-LINK
3D Sync Format	threed.format	?	0 = Frame Sequential 1 = Top / Bottom 2 = Side by side 3 = Frame Packing	Function available dependent on input source & timing.

#### Note:

The projector returns string "NA" when the input command does not apply to current projector status or setup.