

## GS Series

DWX555-GS/DHD555-GS/DWU555-GS

USER MANUAL

020-000724-01

The CD included with this printed manual contains an electronic copy in English. Please read all instructions before using or servicing this product.

手册中包含的光盘，带有着中文的电子副本，使用或维修本产品前，请仔细阅读所有的指示。

Le DC fourni avec ce manuel imprimé contient une copie électronique en français. S'il vous plaît lire toutes les instructions avant d'utiliser ou de réparer ce produit.

Die mit dieser gedruckten Anleitung gelieferte CD enthält eine elektronische Kopie in Deutsch. Bitte lesen Sie alle Anweisungen, bevor Sie dieses Produkt verwenden oder warten.

Il CD fornito con il manuale stampato contiene una copia elettronica in lingua italiano. Si prega di leggere tutte le istruzioni prima di utilizzare o riparare questo prodotto.

この印刷されたマニュアルに同梱されております CD には、日本語での説明書が入っております。この製品を使用あるいは修理点検される際に、ご参照下さい。

매뉴얼과 함께 포함되어 있는 CD 에는 한글로 된 전자사본을 포함하고 있습니다 . 본 제품을 사용 혹은 서비스하기 전에 모든 지침 사항들을 읽어 보시기 바랍니다 .

Поставляемый в комплекте с документацией компакт-диск (CD) содержит электронную копию руководства пользователя на русском языке. Перед началом использования изделия или проведения сервиса пожалуйста прочтите все инструкции изложенные в руководстве.

El DC incluido con este manual impreso contiene una copia electrónica en español. Por favor, lea todas las instrucciones antes de usar o dar servicio a este producto.

## NOTICES

### COPYRIGHT AND TRADEMARKS

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### REGULATORY

The product has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the product is operated in a commercial environment. The product 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 the product in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at the user's own expense.

**WARNING!** Changes or modifications not expressly approved by Christie could void the user's authority to operate the product.

#### FOR COMMERCIAL USE ONLY - POUR USAGE COMMERCIAL UNIQUEMENT

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING 2 CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING ANY INTERFERENCE THAT MAY CAUSE UNDESIRE OPERATION.

THIS CLASS A DIGITAL APPARATUS MEETS ALL REQUIREMENTS OF THE CANADIAN INTERFERENCE-CAUSING EQUIPMENT REGULATIONS.

CET APPAREIL NUMÉRIQUE DE CLASSE A EST CONFORME AUX NORMES DÉFINIES DANS LES RÉGLEMENTATIONS CANADIENNES SUR LES APPAREILS CAUSANT DES INTERFÉRENCES RADIO (CANADIAN INTERFERENCE-CAUSING EQUIPMENT REGULATIONS, ICES-003, CLASS A).


声明 此为 A 级产品，在生活环境中，该产品可能会造成无线干扰。在这种情况下，可能需要用户对其干扰采取切实可行的措施。

이 기기는 업무용 (A 급) 으로 전자파적합등록을 한 기기이오니 판매자 또는 사용자는 이점을 주의하시기 바라며, 가정 외의 지역에서 사용하는 것을 목적으로 합니다.

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## GENERAL

Every effort has been made to ensure accuracy, however in some cases changes in the products or availability could occur which may not be reflected in this document. Christie reserves the right to make changes to specifications at any time without notice. Performance specifications are typical, but may vary depending on conditions beyond Christie's control such as maintenance of the product in proper working conditions. Performance specifications are based on information available at the time of printing. Christie makes no warranty of any kind with regard to this material, including, but not limited to, implied warranties of fitness for a particular purpose. Christie will not be liable for errors contained herein or for incidental or consequential damages in connection with the performance or use of this material.

The product is designed and manufactured with high-quality materials and components that can be recycled and reused. This symbol  means that electrical and electronic equipment, at their end-of-life, should be disposed of separately from regular waste. Please dispose of the product appropriately and according to local regulations. In the European Union, there are separate collection systems for used electrical and electronic products. Please help us to conserve the environment we live in!

Canadian manufacturing facility is ISO 9001 and 14001 certified.

## GENERAL WARRANTY STATEMENTS

For complete information about Christie's limited warranty, please contact your Christie dealer. In addition to the other limitations that may be specified in Christie's limited warranty, the warranty does not cover:

- a. Damage occurring during shipment, in either direction.
- b. Problems caused by combination of the product with non-Christie equipment, such as distribution systems, cameras, video tape recorders, etc., or use of the product with any non-Christie interface device.
- c. Damage caused by misuse, improper power source, accident, fire, flood, lightening, earthquake or other natural disaster.
- d. Damage caused by improper installation/alignment, or by product modification, if by other than a Christie authorized repair service provider.
- e. For LCD projectors, the warranty period specified applies only where the LCD projector is in "normal use." "Normal use" means the LCD projector is not used more than 8 hours a day, 5 days a week. For any LCD projector where "normal use" is exceeded, warranty coverage under this warranty terminates after 6000 hours of operation.
- f. Failure due to normal wear and tear.

## PREVENTATIVE MAINTENANCE

Preventative maintenance is an important part of the continued and proper operation of your product. Please see the Maintenance section for specific maintenance items as they relate to your product. Failure to perform maintenance as required, and in accordance with the maintenance schedule specified by Christie, will void the warranty.

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# 1. SAFETY

Read through this document in its entirety and understand all warnings and precautions before attempting to operate the projector.

## **⚠ WARNING**

- Do not look into the projector lens when the laser is on. The bright light may result in permanent eye damage.
- To reduce the risk of fire or electric shock, do not expose this projector to rain or moisture.
- Do not open or disassemble the projector as this may cause electric shock.
- All installation and maintenance procedures must be performed by a Christie accredited service technician.
- Keep all combustible material away from the concentrated light beam of the projector.
- Position all cables where they cannot contact hot surfaces or be pulled or tripped over.
- Always power down the projector and disconnect all power sources before servicing or cleaning.
- Use a soft cloth moistened with a mild detergent to clean the display housing.
- Disconnect the power plug from the AC outlet if the product is not being used for an extended period of time.
- Operate the projector under the following conditions:
  - Operating temperature range: 5°C to 35°C
  - Storage temperature range: -10°C to 60°C
  - Humidity range: 5% to 80 % RH (Max.), non condensing
  - Operating altitude: 10,000 ft. maximum
- Use only the AC power cord supplied. Do not attempt operation if the AC supply and cord are not within the specified voltage and power range for your region.
- Remove the lens plug from the lens opening in the projector before installing the lens. Retain the lens plug to protect the optical components from dust and debris during transport.
- Do not block the ventilation slots and openings on the projector.
- Do not use abrasive cleaners, waxes or solvents to clean the projector.
- Do not allow anything to rest on the power cord.

### Warning

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

### Important Laser Notice



Complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007.  
IEC 60825-1:2007

### ⚠ WARNING

- This projector is a Class 2 laser device that conforms with IEC 60825-1:2007 and CFR 1040.10 and 1040.11
- Class 2 laser product, Do Not Stare Into Beam
- This projector has built-in Class 4 laser module. Disassembly or modification is very dangerous and should never be attempted.
- Any operation or adjustment not specifically instructed by the user's guide creates the risk of hazardous laser radiation exposure.
- Do not open or disassemble the projector as this may cause damage by the exposure of laser radiation.
- Do not stare into beam when the projector is on. The bright light may result in permanent eye damage.
- Without following the control, adjustment or operation procedure may cause damage by the exposure of laser radiation.

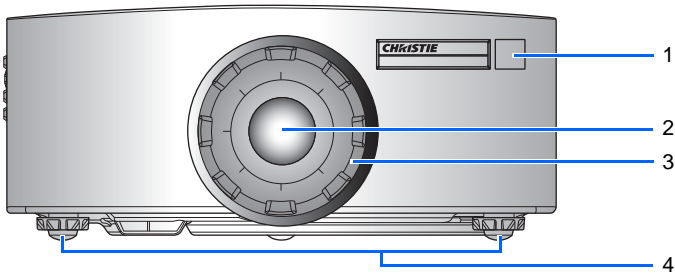


## 2. INTRODUCTION

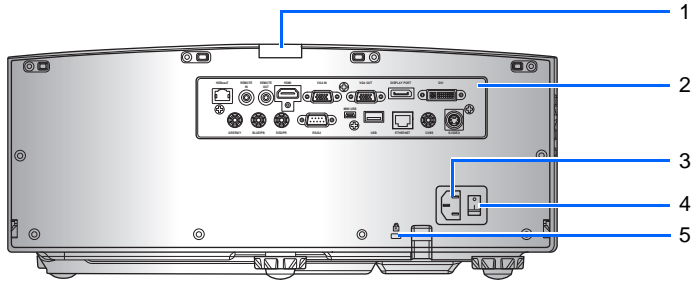
The product specified in this document is a high brightness, high-resolution video/graphics 1-chip laser based projector. The projector is available in WXGA, HD and WUXGA resolutions. The projector utilizes Digital Light Processing (DLP®) technology from Texas Instruments. It is primarily designed for fixed installation markets.

### 2.1 Projector Components

*Front View*

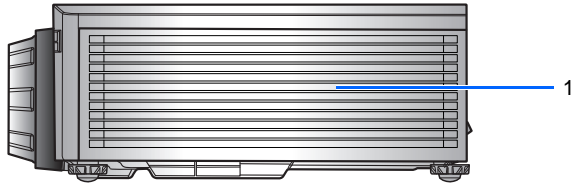


Ind.	Part Name	Description
1	Front IR Sensor	Receives signals from the IR remote. Keep the signal path to the sensor unobstructed for uninterrupted communication with the projector.
2	Projection Lens	Allows automated lens control and adjustment: vertical and horizontal offsets, zoom and focus.
3	Lens Ring	Protects the lens motors and mechanism. Remove in order to insert or remove the lens.
4	Adjustable Feet	Raise or lower the feet to level the projector.

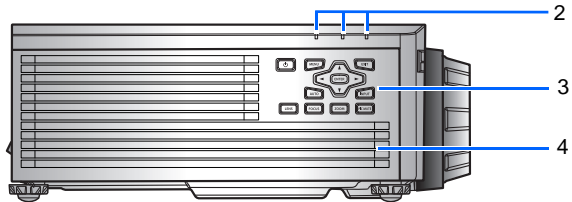
*Rear View*

Ind.	Part Name	Description
1	Rear IR Sensor	Receives signals from the IR remote. Keep the signal path unobstructed for uninterrupted communication with the projector.
2	Input/Output (I/O) Panel	Connects the projector to external devices.
3	AC Input	Connect to the supplied power adapter.
4	Power Button	Switch the power button to turn on the power source.
5	Kensington Lock	Use to secure the projector to countertops, tables, etc.

*Left View*

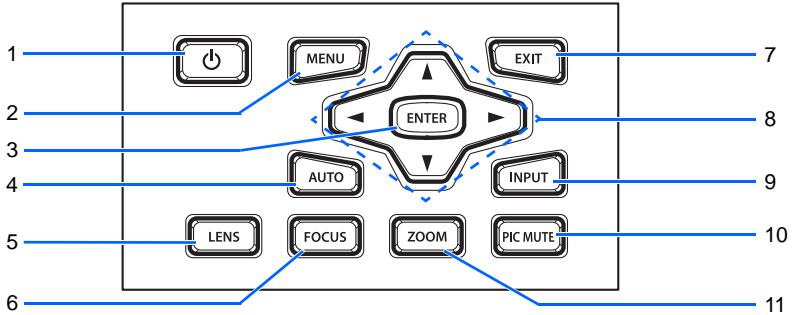


*Right View*



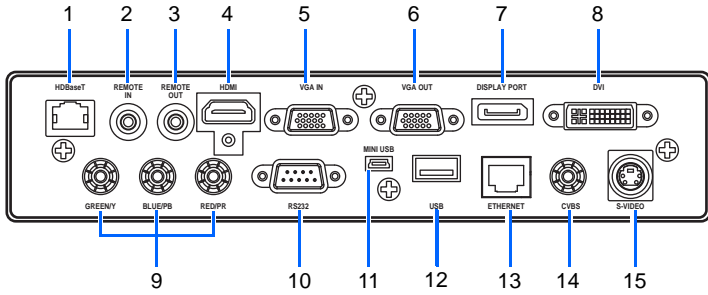
Ind.	Part Name	Description
1	Cooling Air Vents (Intake)	Keep these vents unobstructed to prevent the projector from overheating.
2	LED Status Indicators	Displays the status of the projector. They are (from left to right): LIGHT, STATUS, and PIC MUTE.
3	Built-in Keypad	Controls the projector.
4	Cooling Air Vents (Exhaust)	Keep these vents unobstructed to prevent the projector from overheating.

**2.2 Built-in Keypad**



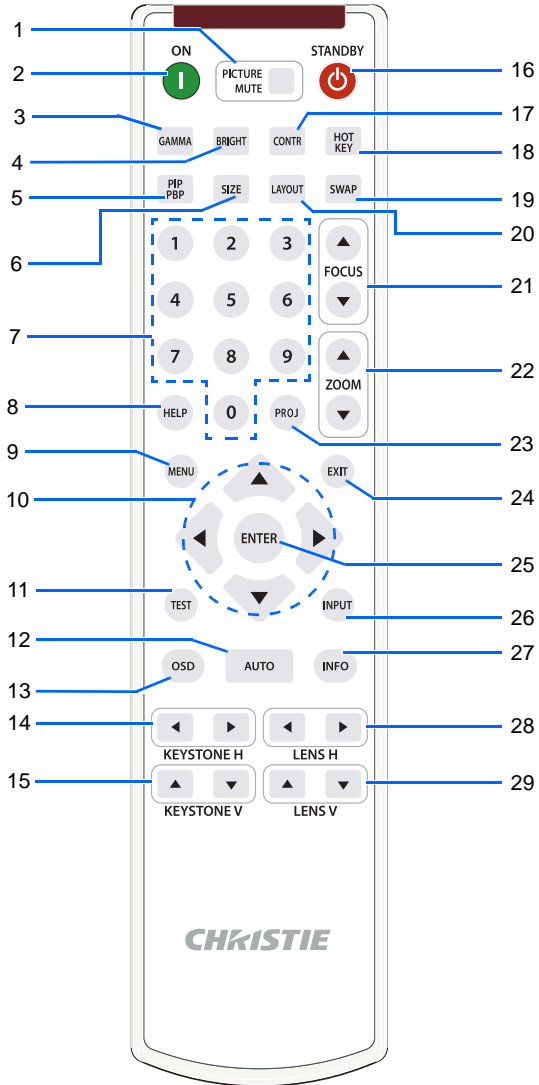
Ind.	Part Name	Description
1	Power	Turn the projector on or off
2	Menu	Display menus
3	Enter	Confirm a selection
4	Auto	Automatically optimize image
5	Lens	Adjust the lens vertical or horizontal offset setting
6	Focus	Adjust focus
7	Exit	Return to previous level or exit menus if at top level
8	Arrow Keys	<ul style="list-style-type: none"> <li>Adjust a setting UP or DOWN</li> <li>Navigate within a menu</li> </ul>
9	Input	Select an input for the main or PIP/PBP image
10	Picture Mute	Display or blank the video image.
11	Zoom	Adjust zoom

### 2.3 Input/Output (I/O) Panel



Ind.	Connector Name	Ind.	Connector Name
1	HDBaseT	9	Component IN
2	Remote IN	10	RS232
3	Remote OUT	11	Mini USB
4	HDMI	12	USB Type A
5	VGA-IN	13	Ethernet
6	VGA OUT	14	CVBS
7	Display Port	15	S-Video
8	DVI		

**2.4 Remote Control**



Ind.	Part Name	Description
1	Picture Mute	Display or blank the video image.
2	Power on	Turn projector ON.
3	Gamma	Adjust mid-range levels.
4	Bright	Adjust amount of light in the image.
5	PIP/PBP	Turn PIP/PBP ON/OFF.
6	Size	Adjust the PIP/PBP size
7	Number Keys	Enter a number, such as a channel, value, etc.
8	Help	Display context-sensitive help.
9	Menu	Display menus.
10	Arrow Keys	<ul style="list-style-type: none"> <li>Adjust a setting UP or DOWN.</li> <li>Navigate within a menu.</li> </ul>
11	Test	Display a test pattern.
12	Auto	Automatically optimize image.
13	OSD	Use to hide or show menus.
14	Keystone H	Adjust the horizontal keystone.
15	Keystone V	Adjust the vertical keystone.
16	Standby	Turn projector OFF.
17	Contrast	Adjust difference between dark and light.
18	Hot-key	Select your preset keys quickly.
19	Swap	Swap the main and PIP/PBP images.
20	Layout	Adjust the PIP/PBP layout.
21	Focus	Adjust focus to improve image clarity as desired.
22	Zoom	Adjust zoom to achieve a desired image size.
23	Proj Key	Change the remote ID. Press Proj Key then a number between 1 and 9 to assign an ID. Press PROJ then number 0 to return to the universal remote ID.
24	Exit	Return to previous level or exit menus if at top level.
25	Enter	<ul style="list-style-type: none"> <li>Select a highlighted menu item.</li> <li>Change or accept a value.</li> </ul>
26	Input	Select an input for the main or PIP/PBP image.
27	Info	Display source image information.
28	Lens H	Horizontal Lens Shift - Adjust the position of the image horizontally.
29	Lens V	Vertical Lens Shift - Adjust the position of the image vertically.

## 2.5 LED Status Indicators

The LED status indicators are located on the right side of the projector. Each LED is defined below.

- LIGHT LED

LED Status	Projector State
Red (flashing)	When projector has lost over 60% initial luminance
Orange (solid)	Laser diode time has expired
Green (solid)	Laser diode is on and operating correctly
Off	Laser diode is off

- STATUS LED

LED Status	Projector State
Off	AC power is off (without AC plug in)
Off, but keypad LED is on	AC has been applied, projector is in standby mode
Green (solid)	Projector is powered up and operating normally
Green (flashing)	Projector communications
Orange (solid)	Non-portrait mode used NOTE: Please refer to section 3.5.
Orange (flashing)	Projector is in cool down mode or startup mode
Green (flashing) / Red (flashing)	Projector is in flash (LAN) update state
Red (solid)	Over-temperature
Red (flashing)	Fan failure



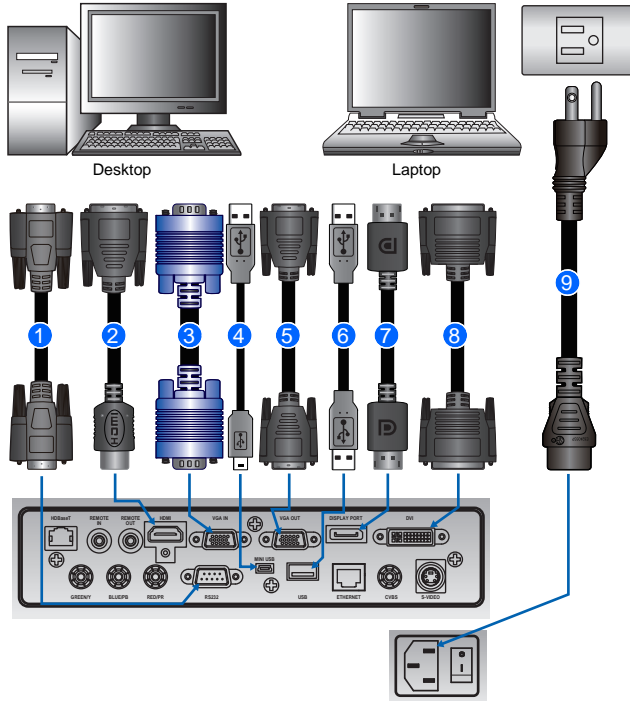
- PICTURE MUTE LED

LED Status	Projector State
Green (solid)	Light is on - image is displayed
Orange (solid)	Light is on - image is blank



### 3. INSTALLATION

#### 3.1 Connect to Computer

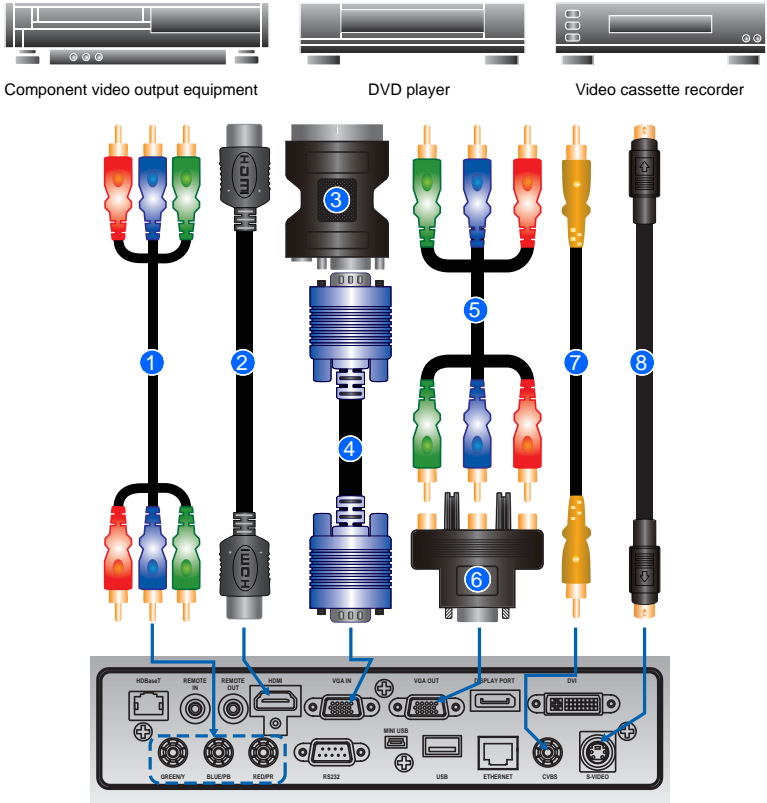


Ind.	Connector Name	Ind.	Connector Name	Ind.	Connector Name
1	RS232 Cable	4	USB Type B Mini	7	Cable
2	HDMI Cable	5	VGA out Cable	8	DVI Cable
3	VGA in Cable	6	USB Type A Cable	9	Power Cord

**NOTE:**

- ❖ The diagram shows the cables/connectors that may be used to connect to various devices.
- ❖ Due to the difference in applications for each country, the accessories required in some regions may be different from those shown.
- ❖ This diagram is for illustrative purposes only, and does NOT indicate that these accessories are supplied with the projector.

### 3.2 Connect to Video Equipment



Ind.	Connector Name	Ind.	Connector Name	Ind.	Connector Name
1	Component (YPbPr) Cable	4	VGA in Cable	7	CVBS Cable
2	HDMI Cable	5	3 RCA Component Cable	8	S-Video Cable
3	VGA to RGB SCART Adapter	6	15-pin to 3 RCA Component/HDTV Adapter		

**NOTE:**

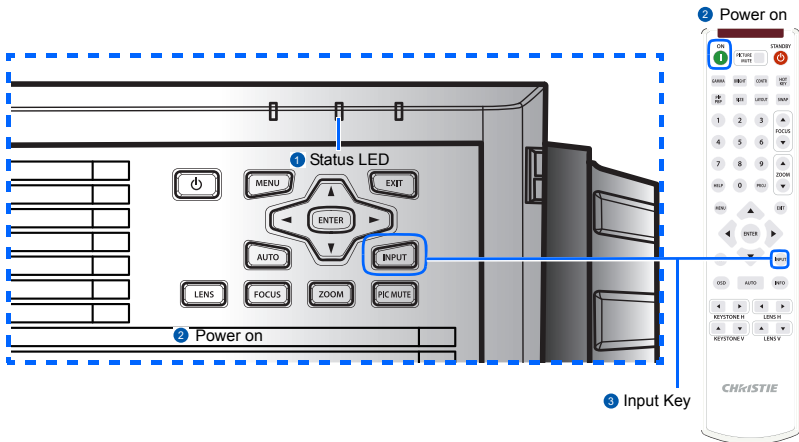
- ❖ The diagram shows the cables/connectors that may be used to connect to various devices.
- ❖ Due to the difference in applications for each country, the accessories required in some regions may be different from those shown.
- ❖ This diagram is for illustrative purposes only, and does NOT indicate that these accessories are supplied with the projector.

### 3.3 Turn the Projector On

1. Ensure that the power cord and signal cable are securely connected. The Power button on the built in keypad is illuminated. ❶
2. Turn on the projector by pressing "ON" on the remote control or press "⏻" on the built-in keypad. The Status LED is Orange with a long blink. ❷
3. Turn on the source. Select Input Key on the remote control to select an input source (VGA, BNC, HDMI, Component, S-Video or Composite Video). ❸
4. The projector detects the source you selected and displays the image.

**NOTE:**

- ❖ *The first time the projector is used, the preferred language may be selected from the main menu after the startup screen is displayed.*



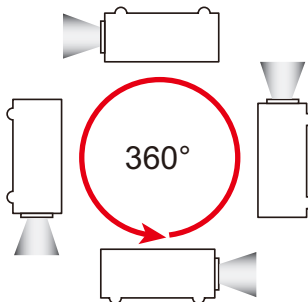
### 3.4 Turn the Projector Off

1. Press "⏻" on the built-in keypad or on the remote control to turn off the projector. A warning message will appear on the displayed image.
2. Press "⏻" again to confirm your selection. If you do not press "⏻" again, the warning message will disappear after 10 seconds.

### 3.5 Adjust the Projector Position

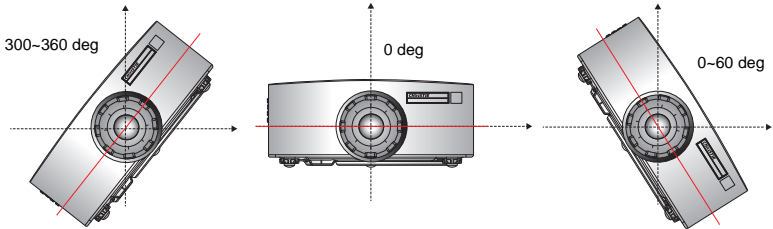
When you select a position for the projector, consider the size and shape of your screen, the location of your power outlets, and the distance between the projector and the rest of your equipment. Follow these general guidelines:

- Position the projector on a flat surface at a right angle to the screen. The projector (with the standard lens) must be at least 3 feet (0.9m) from the projection screen.
- Position the projector to the desired distance from the screen. The distance from the lens of the projector to the screen, the zoom setting, and the video format determine the size of the projected image.
- For the fixed short lens, the image exits at a default angle. However, the lens shift feature makes the image offset variable.
- Lens throw ratio:
  - Lens 1.22~1.53 (WU/HD)
  - Lens 0.95~1.22 (WU/HD)
  - Lens 1.52~2.92 (WU/HD)
  - Lens 1.28-1.61 (WX)
  - Lens 1.0-1.28 (WX)
  - Lens 1.6-3.07 (WX)
- 360 degree operation (alone the widest axis)



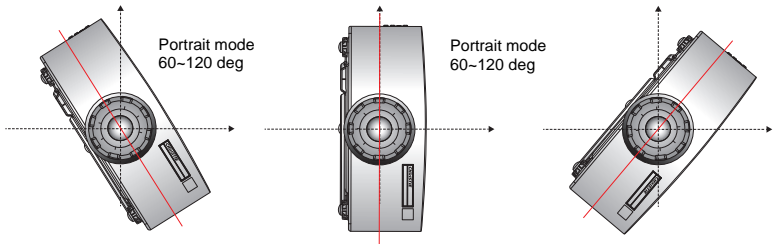
**Table Top Mode**

- The projector is in table top mode when the viewing angle is from 0° to <60° and from >300° to 360° as illustrated below.



**Portrait Mode**

- The projector is in portrait mode when the viewing angle is from 60° to 120° as illustrated below.

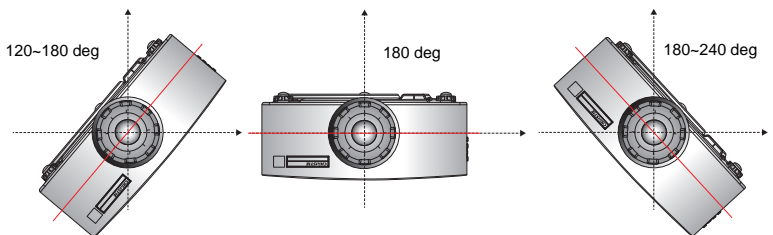


**▲ WARNING**

- In portrait orientation, the Portrait Side Cover must be installed on the side of the projector which is now the lower side. Refer to section 3.9.

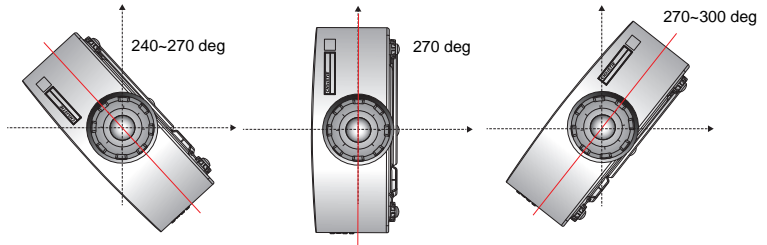
**Inverted Mode**

- The projector is in Inverted/Ceiling Mount Mode when the viewing angle is from >120° to <240° as illustrated below.



**Non-Supported Modes**

- The projector is in non-portrait mode when the viewing angle is 240° to 300° as illustrated below.
- The "orange" status LED on projector lights on.

**⚠ WARNING**

- The projector should not be operated in Non-Portrait Mode.

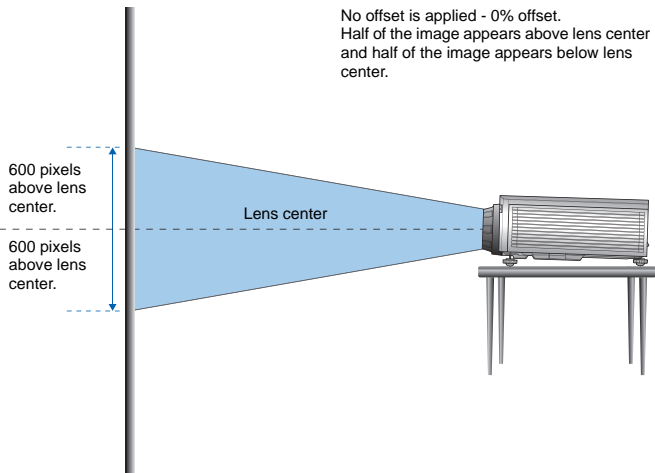


### 3.6 Calculate Lens Offset

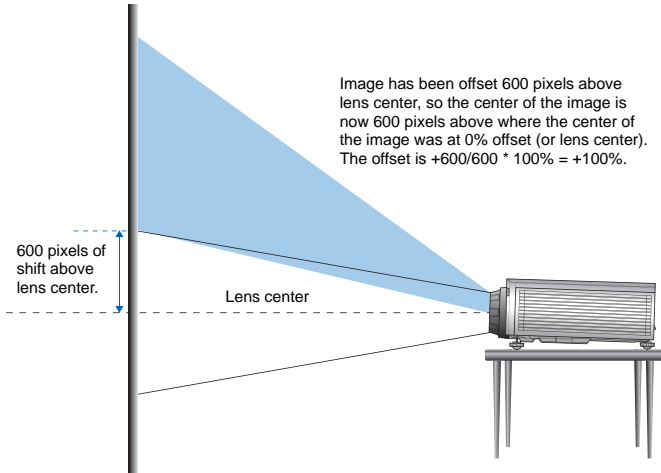
- The vertical image offset (shift) ranges for the projector are +/-100% (WXGA/WUXGA) and +/-120% (HD). The horizontal image offset (shift) range for the projector are +/-30% (WXGA/HD/WUXGA).
- The method for calculating lens offset complies with Industry standards.  
Example for Vertical lens offset:
  - At 0% offset (or on axis), the center of the image is on the lens center, so that half of the image appears above and half appears below the lens center.
  - At +100% offset, all (or 100%) of the image will appear above the lens center.
  - The % offset is calculated as the ratio of the number of pixels shifted up/down to half the image size. Examples for WUXGA:
    - ▶ Shifting up 600 pixels gives offset of  $600/600 * 100\% = 100\%$
    - ▶ Shifting down 600 pixels gives offset of  $-600/600 * 100\% = -100\%$
    - ▶ Shifting up 720 pixels gives offset of  $720/600 * 100\% = 120\%$
    - ▶ Shifting up 240 pixels gives offset of  $240/600 * 100\% = 40\%$

WUXGA Projectors:

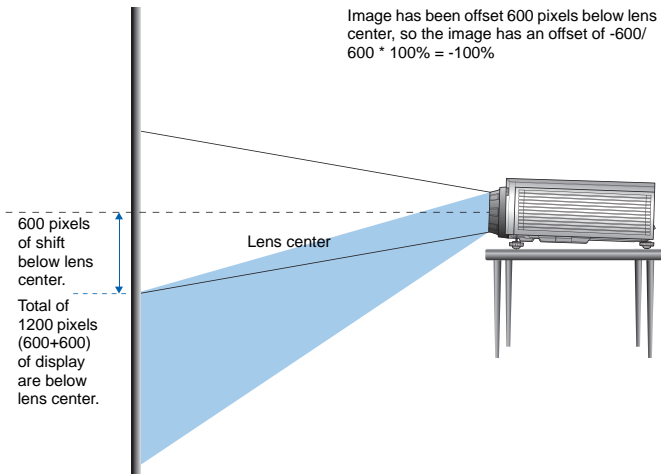
*Vertical Image Offset: 0% Offset (WUXGA)*



*Vertical Image Offset: 100% Offset (WUXGA)*

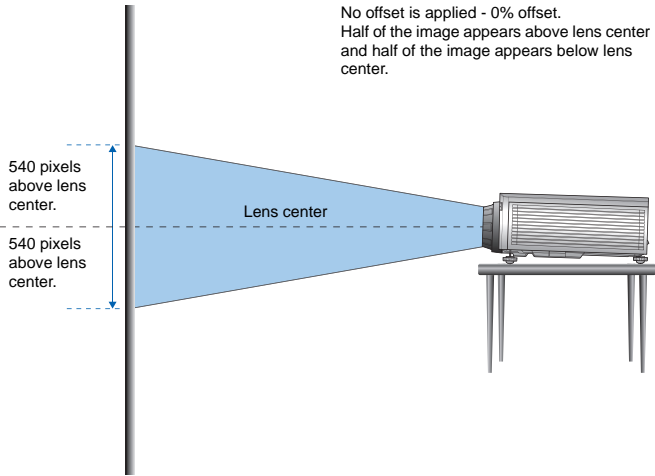


*Vertical Image Offset: -100% Offset (WUXGA)*

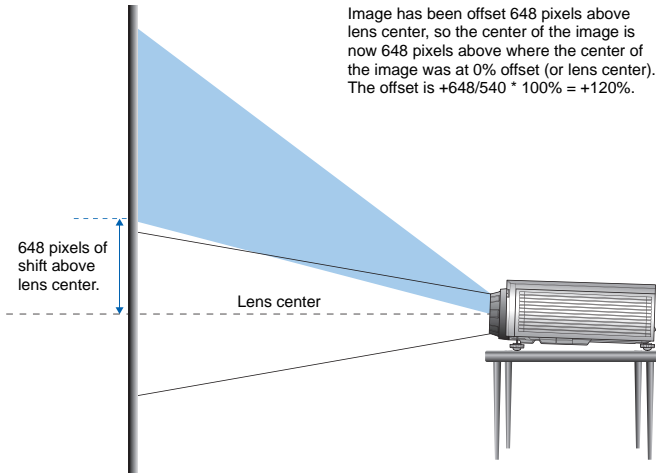


HD Projectors:

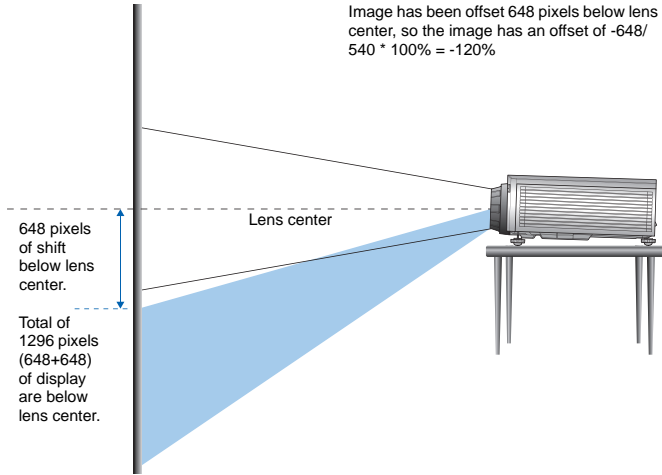
*Vertical Image Offset: 0% Offset (HD)*



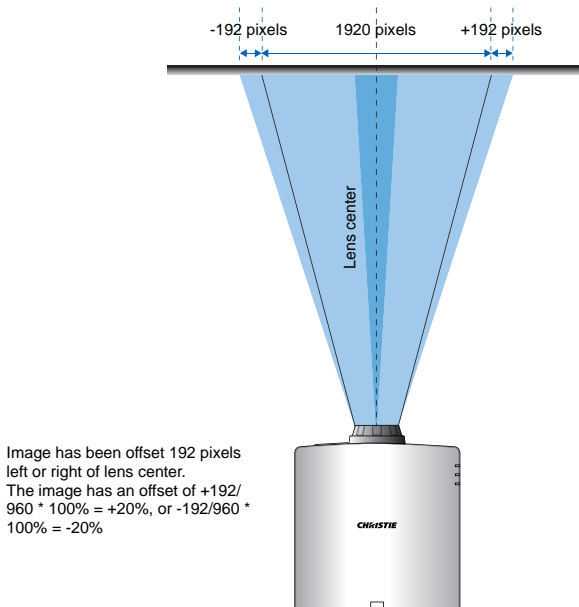
*Vertical Image Offset: 120% Offset (HD)*



*Vertical Image Offset: -120% Offset (HD)*

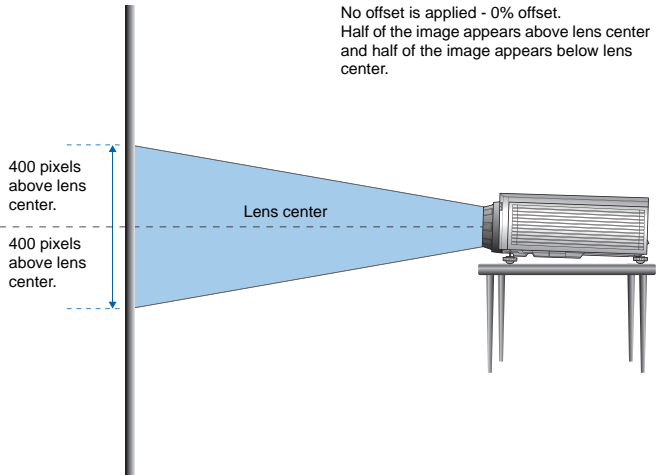


*Horizontal Image Offset: +/-30% Offset*

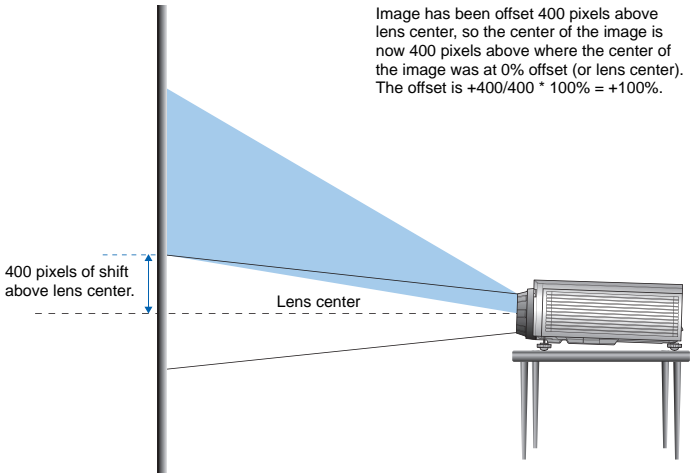


WXGA Projectors:

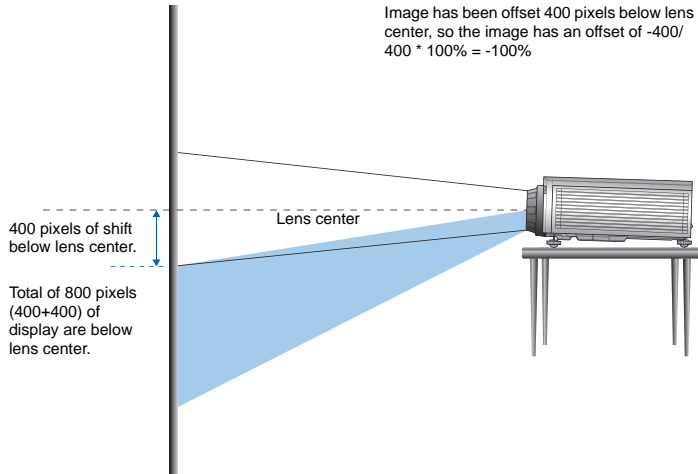
*Vertical Image Offset: 0% Offset (WXGA)*



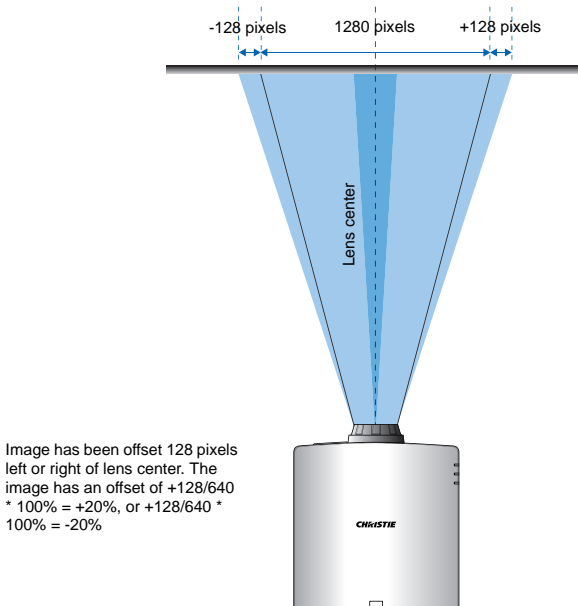
*Vertical Image Offset: 100% Offset (WXGA)*



*Vertical Image Offset: -100% Offset (WXGA)*



*Horizontal Image Offset: +/-30% Offset*

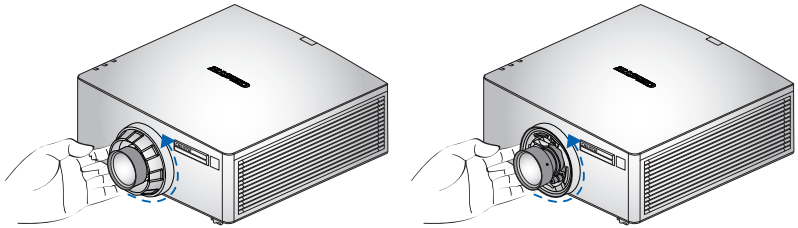


### 3.7 Removing and Installing the Lens

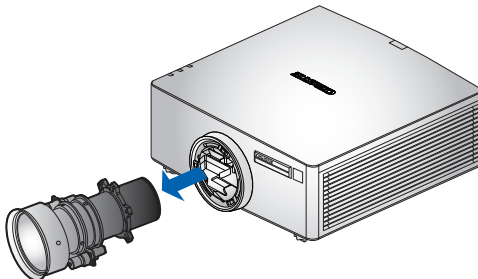
When handling the projector after lens installation, make sure the front lens cap is placed on the lens to protect the lens surface from potential damage. When carrying or moving the projector, do not handle by the lens. This may damage the lens, the chassis or other mechanical parts within the projector.

#### Installation Steps:

1. **Center the lens:** Ensure that the lens is at or near its center position. Attempting to remove the lens when at a large offset may cause damage to the lens assembly. Center the lens while the projector is switched on by pressing the lens horizontal or vertical button and then pressing Enter.
2. **Turn Off the projector:** Turn the projector OFF.
3. **Wait for projector to cool down:** Allow the projector to cool down into standby mode before replacing the lens. Remove power cord after the projector has cooled down and prior to replacing the lens.
4. **Remove the lens:** Remove the lens ring cover. Rotate the lens counter-clockwise by a quarter to release the lock. Remove the lens through the front of the projector.

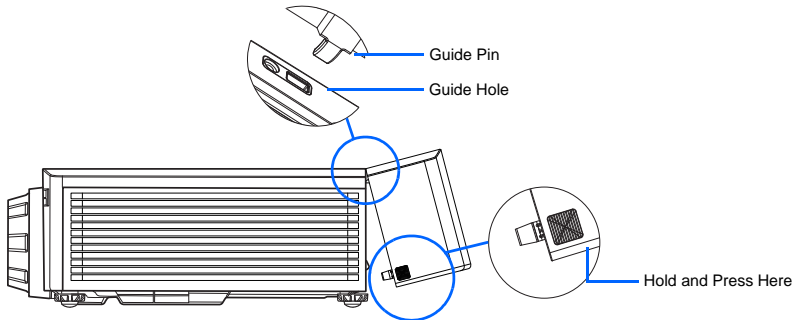


5. **Install the new lens:** Fully insert the lens assembly straight into the lens mount without turning. Rotate the lens cap clockwise to lock the lens in place.



### 3.8 Cable Cover Installation

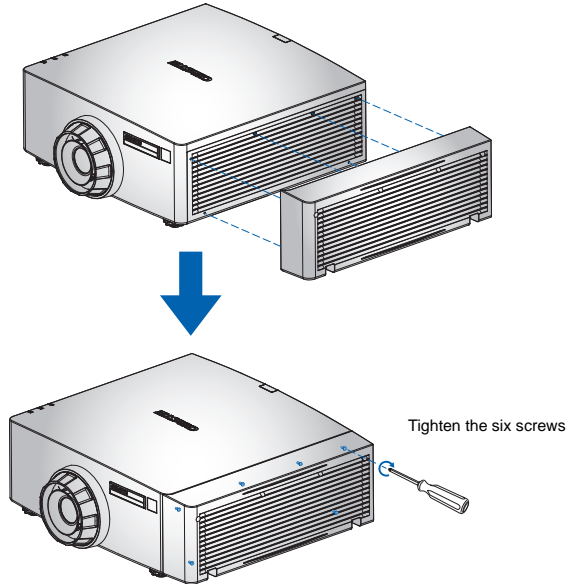
1. Rotate the cable cover and insert the two guide pins into the guide holes.
2. Press and hold both lower corners of the cable cover while inserting the sheet clips into the projector casing.



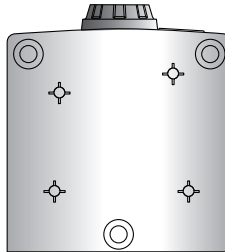


### 3.9 Portrait Cover Installation

1. Attach the Portrait cover to the left side of the projector and secure with the 6 step screws.



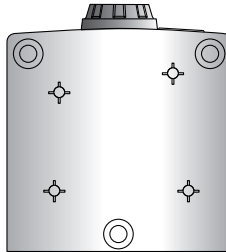
2. Mount the projector in an appropriate mounting kit, using the 4 mounting points on the underside of the projector.

**⚠ WARNING**

- Mount with the portrait cover side facing downwards.
- The projector must not stand on a table top on the portrait cover

### 3.10 Ceiling Mount Installation

Mount the projector with an appropriate mounting kit, using the 4 mounting points on the underside of the projector.

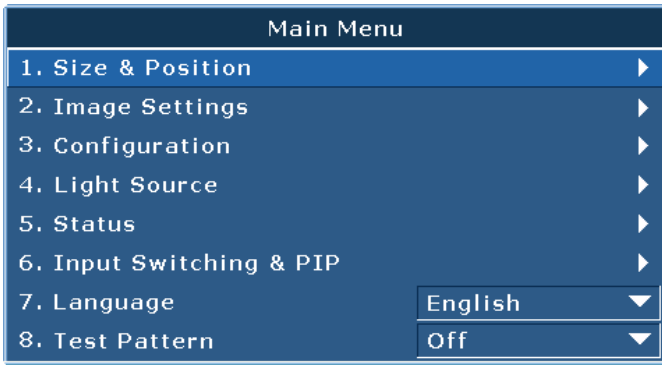


- When not mounted properly, the projector may fall, causing hazards or injury. The warranty on this projector does not cover any damage caused by the use of any non-recommended ceiling mount kit or installation of the ceiling mount kit in an improper location.
- Refer to the installation instructions and safety guidelines provided in the kit.

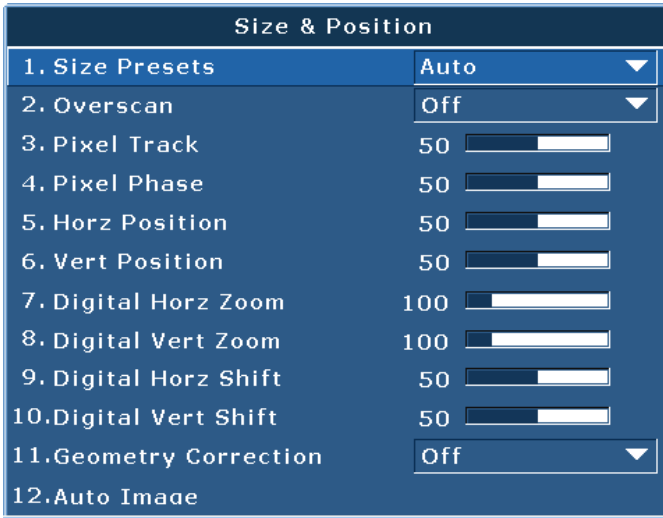
## 4. OPERATION

The projector has multilingual On-Screen Display (OSD) menus that allow you to make image adjustments and change a variety of settings.

- Most of the projector controls are accessed from within the projector menu system. There are several groups of related functions, with each group selectable from the Main menu as shown below. Press the MENU button on the remote control or on the built-in keypad on the rear of the projector to display the main menu.
- Use the arrow keys to navigate within the menu and adjust a setting up or down.
- Press ENTER to select a highlighted menu item or use it to change or accept a value.
- Select the next item that you want to adjust in the menu and adjust it as described above.
- Press EXIT to return to the previous menu or exit menus if at top level.



**4.1 Size and Position Menu**



**Size Presets**

Display an image with the detected size, or resize the image by maximizing either the height, width or both, or resize to the maximum size possible while keeping the original aspect ratio.

- Auto: Display with the detected size.
- Native: Display in its native resolution.
- 4:3: Retain 4:3 aspect ratio.
- Letterbox: Display with the black borders on the top and bottom.
- Full Size: Fill the screen (regardless of the source).
- Full Width: Fill display width and keep aspect ratio.
- Full Height: Fill display height and keep aspect ratio.
- Custom: Stretch the display horizontally or vertically without cutting the image display

**Overscan**

Remove noise around the image. Overscan Zoom enlarges image 6% from original size. Overscan Crop cuts 6% of active pixels in four edges of original image.

**Pixel Track**

Analog RGB signals only. Steady flickering or several soft vertical stripes or bands across the entire image indicates poor pixel tracking. Proper pixel tracking ensures that the image quality is consistent across the screen, the aspect ratio is maintained, and that the pixel phase can be optimized.

Pixel Phase

Analog RGB Signals only. Adjust pixel phase when the image still shows shimmer or noise after pixel tracking is optimized. Pixel phase can adjust the phase of the pixel-sampling clock relative to the incoming signal.

Horz Position

Move the image right or left within the area of available pixels.

Vert Position

Move the image up or down within the area of available pixels.

Digital Horz Zoom

Change the size of projector's display area horizontally. If the display area has been resized by this setting, it can be moved by changing the Digital Horz Shift and Digital Vert Shift settings.

Digital Vert Zoom

Change the size of projector's display area vertically. If the display area has been resized by this setting, it can be moved by changing the Digital Horz Shift and Digital Vert Shift settings.

Digital Horz Shift

Move the display area horizontally if its size has been changed by the Digital Zoom setting.

Digital Vert Shift

Move the display area vertically if its size has been changed by the Digital Zoom setting.

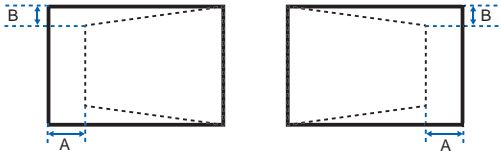
Geometry Correction

The "Geometry Correction" can be controlled with the options in the drop-down list: "Off/Basic" when optional Dual Processor Warp Module is not installed, and "Off/Basic/Curve/Rotate" when optional Dual Processor Warp Module is installed.

**Geometry Correction Feature Compatibility**

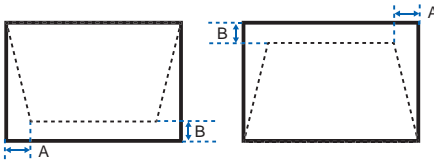
Warp Function	4-Corner	Curved Surface(2x2)	Keystone	Pincushion and Barrel	Rotation
4-Corner	--	✓	✓	✓	✓
Curved Surface(2x2)	✓	--	X	X	X
Keystone	✓	X	--	✓	X
Pincushion and Barrel	✓	X	✓	--	X
Rotation	✓	X	X	X	--

- Off: No Geometric correction is applied to the image.
- Horz Keystone: Adjust the keystone horizontally and make a more square image. Horizontal keystone is used to correct a keystoneed image shape in which the left and right borders of the image are unequal in length, and the top and bottom are slanted to one of the sides. This is intended for use with horizontally on-axis applications. For horizontally offset applications, you must use 4 Corner correction using the optional Dual Processor Warp Module.



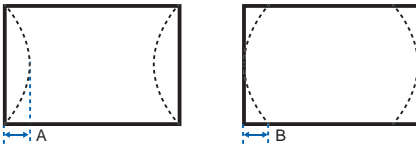
Ind.	WXGA	1080P	WUXGA
A	12.3%	10.2%	7.1%
B	7.7%	6.4%	5.2%

- Vert Keystone: Adjust the keystone vertically and make a more square image. Vertical keystone is used to correct a keystoneed image shape in which the left and right borders of the image are unequal in length, and the top and bottom are slanted to one of the sides. This is intended when for use with horizontally on-axis applications. For horizontally offset images, you must use 4 Corner correction using the optional Dual Processor Warp Module.



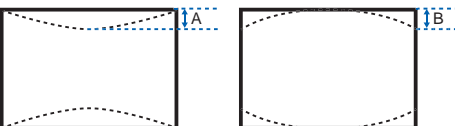
Ind.	WXGA	1080P	WUXGA
A	5.4%	4.4%	3.3%
B	10.4%	8.7%	5.4%

- Horz Pincushion: Adjust the pincushion horizontally and make a more square image.



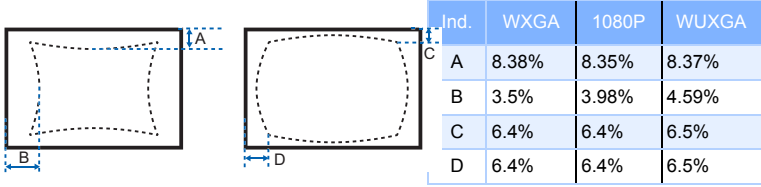
Ind.	WXGA	1080P	WUXGA
A	16.0%	13.3%	8.0%
B	16.0%	13.2%	7.9%

- Vert Pincushion: Adjust the pincushion vertically and make a more square image.

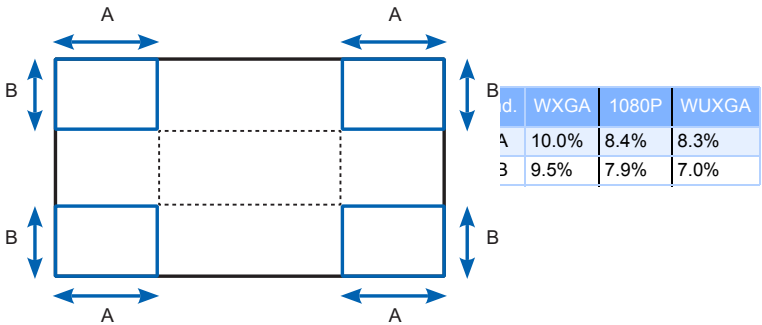


Ind.	WXGA	1080P	WUXGA
A	14.7%	12.3%	11.4%
B	14.7%	12.1%	11.4%

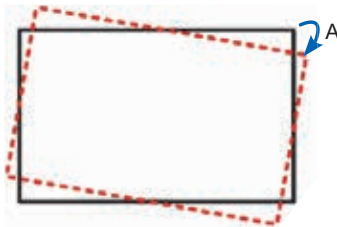
- Pincushion/Barrel: Allow for correction for slight curved distortion from the lens or projection surface.



- 4-Corner: Allow the image to be squeezed to fit an area defined by moving each of the four corners' x and y position.



- Rotation: Allow an image to be rotated - most commonly to level the image. While the image is rotated, the software can crop any content that begins to fall off the panel. The function will not automatically scale the image down to prevent cropping. If scaling is required, the digital zoom function can be used, independently of the rotation function.



Ind.	WXGA	1080P	WUXGA
A	10.0%	8.4%	8.3%

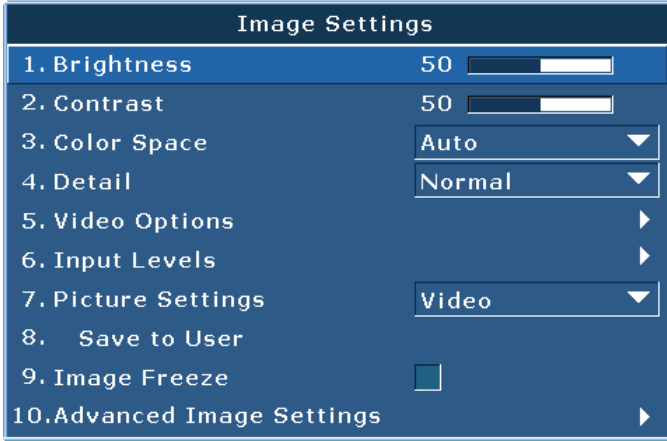
### Auto Image

Force the projector to reacquire and lock to the input signal. This is useful when signal quality is marginal. "Normal mode" can support all of the 4:3 input sources.

"Wide mode" can support all of the 16:9 input source & most of the 4:3 input source. For those 4:3 input sources not recognized by "Wide mode" (example 1400 x 1050), perform Auto Image using "normal mode".



## 4.2 Image Settings Menu



### Brightness

Adjust the intensity of the image.

### Contrast

Adjust the degree of difference between the lightest and darkest parts of the picture and change the amount of black and white in the image.

### Color Space

Select a color space that has been specifically tuned for the input signal. Useful only for analog signals and certain digital sources.

### Detail

Select the edge clarity of the image.

### Video Options

This function is used with video sources only.

- **Color:** Adjust a video image from black and white to fully saturated color. The color setting applies to video sources only.
- **Tint:** Adjust the red-green color balance in the image of NTSC video images. The tint setting applies to NTSC video sources only.
- **Noise Reduction:** Reduce temporal or spatial noise in the image.
- **Flesh Tone Correction:** Control the amount of flesh tone correction applied to the image.

- Video Black Level: Analyze the current input image and calculate an offset value which is then added to the analog to digital converter black level value. This ensures optimum black level for each analog source.
- Detect Film: Control film mode detection and determine whether the original source of the input video was film or video.
- Closed Captions: Control closed caption display while audio is not muted.
- If this setting is not off, audio is not muted, the source is NTSC and contains captions on the selected channel, then the projector must display caption text overlaid on the image.

### Input Levels

VGA / Component signals only.

- Adjust the gain of the red, green, or blue channel of the image. It will affect the black and white.
- Adjust the offset of the red, green, or blue channel of the image. It will affect the black and white.
- Sync Threshold: (progressive signals only) If a hardware device, such as a DVD player, is not syncing properly with the projector, select this option to help it to sync when connected to the projector.

### Picture Settings

Optimize the projector for displaying images under certain conditions, such as presentation, video, bright, real, dicom sim, and user-definable preset. It will affect Gamma, Sharpness, White Peaking, Overscan, Brightness, Contrast, Color, Tint, Red Gain, Green Gain, Blue Gain, Red Offset, Green Offset, Blue Offset.

### Save to User

Adjust the image settings and select Save to User as a picture setting. You can recall these settings in the future by selecting the User in the Picture Settings menu. The setting of Brightness, Contrast, Color, Tint, Red Gain, Green Gain, Blue Gain, Red Offset, Green Offset, Blue Offset, Color Temp, Gamma, Detail, Whitepeaking and Overscan will be saved.

### Image Freeze

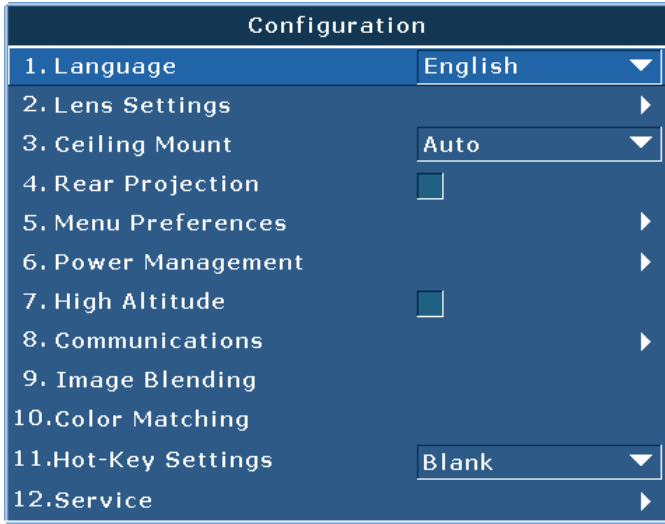
Pause the screen image.

### Advanced Image Settings

- Gamma: Select the appropriate gamma from Video, Film, Bright, CRT, and DICOM.

- 
- White Peaking: (video source only) Increase the brightness of whites that are near 100%.
  - Color Temperature: Change the intensity of the colors. Select a listed relative warmth value.
  - Edge Enhancement: Apply the edge enhancement process.

### 4.3 Configuration Menu



#### Language

Allows you to select an available language for the OSD display, from English, French, German, Italian, Spanish, Chinese(simplified), Japanese, Korean, and Russian.

#### Lens Settings

- Focus and Zoom: Adjust the focus and zoom the image in or out.
- Lens Shift: Shift the lens up and down or left and right.
- Lock Lens Motors: Select this function to prevent all lens motors from moving. It will disable the Zoom, Focus, Horizontal and Vertical Position settings, effectively locking out any changes and overriding all other lens features. This is particularly useful to prevent accidental lens position changes in multi-projector installations.
- Lens Calibration: Calibrate the lens center

#### Ceiling Mount

Turn the image upside down for ceiling-mounted projection.

#### Rear Projection

Reverse the image so you can project from behind a translucent screen.

### Menu Preferences

- Menu Horz Position: Change the horizontal position of the OSD.
- Menu Vert Position: Change the vertical position of the OSD.
- Show Messages: Display status messages on the screen.
- Menu Transparency: Change OSD menu background to be transparent.

**NOTE:**

✧ *As the value increases, more of the image behind the menu is visible.*

- Splash Screen: Choose which splash screen is to be used.
- PIN Protect: The PIN (personal identification number) feature allows you to password protect your projector. Once you enable the PIN feature, you must enter the PIN before you can project an image.
- Change PIN: Allows you to change the PIN.

### Power Management

- Standby Mode: The projector is in standby mode when connected to AC power. (<0.5W)
- AC Power On: The projector automatically turns on when electrical power is connected.
- Auto Shutdown: Automatically turns the projector off after no signals are detected for a preset number of minutes. If an active signal is received before the projector powers down, the image will be displayed.
- Sleep Timer: Allows the projector to automatically power off after it has been on for a specified amount of time.

### High Altitude

Set high altitude mode ON/OFF. When ON, the fan will operate at high speed to ensure sufficient air flow for high altitudes.

### Communications

- Network: Allow you to setup network settings.
  - DHCP: Turn the DHCP ON/OFF.
  - IP Address: Assign Network IP Address.
  - Subnet Mask: Assign Network Subnet Mask.
  - Default Gateway: Assign Network Default Gateway.
  - Host Name: Display the host name.
  - MAC Address: Displays network MAC Address value.
  - Show Network Messages: Turn network messages ON/OFF.
  - Restart Network: Restart the network.
  - Network Factory Reset: Perform factory reset on the network settings. The Projector Name, LAN IP, WLAN IP, and SNMP settings will be reset.
- Baud Rate: Select the serial port and baud rate.

- Serial Port Echo: Control whether the serial port echoes characters.
- Serial Port Path: Select the serial port path from either RS232 or HDBaseT.
- Projector Address: Set the projector address (0-9). The projector will respond to IR remotes set either at the same address as the projector or to IR remotes set to address 0.

### Image Blending

Adjust blend widths and settings to left, right, top and/or bottom sides to create a seamless multi-projector stitched image. (Available only when optional Dual Processor Warp Module is installed.)

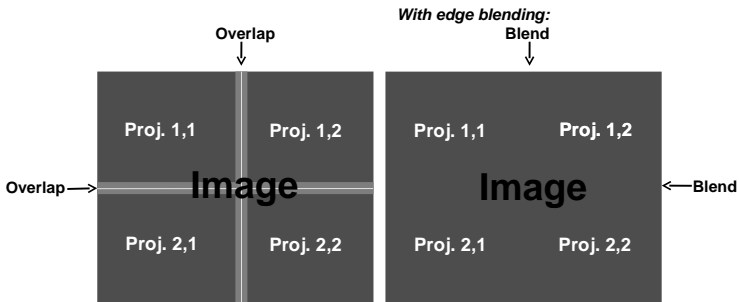
#### What is a Blend?

In simple terms, a blend appears as a gradient strip along an edge of a projected image. It is darkest along the extreme edge of the image, and lightens nearer to the rest of the image(see below).



#### How are Blends used?

In multiple-projector wall, complementary blends between neighboring images can compensate for the extra "brightness" or intensity where these edges overlap. By controlling blend width and other properties, you can achieve uniformity across the group of images. "Visible overlaps will disappear, as shown below"



Blending regions can be defined on all sides - left, right, top and bottom. The same gamma curve is used for all blending regions.

### Color Matching

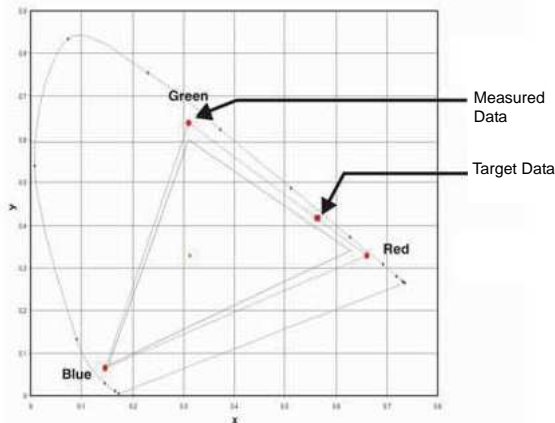
You may require a unique color gamut (range) for a single projector or application, or you may need to precisely match colors across multiple adjacent displays. Use Color Matching by Meter Adjustment or by Manual Adjustment to define the precise hue of each primary color component (red, green, blue and white).

The x/y coordinates for each color define its location on the standard CIE chromaticity graph. Changing either or both of these numbers will change the hue of the color, and modify the range of possible colors. For example, changing the x/y coordinates for red may move the color closer to orange or closer to violet, which will in turn affect all displayed colors having a red component. Adjust the slide bars or enter new specific coordinates as desired to define or change the color gamuts needed for your environment and applications.

Enable the selected method (Meter or Manual Adjustment)- this will automatically disable the other method. For both methods, if Auto Test Pattern is enabled, the solid colored test pattern will be displayed according to the menu item on which you are positioned.

- Meter Adjustment

- 1 Using a color meter, enter the current x and y co-ordinates of Red, Green, Blue and White for the projector image into the Measured Data menu. This is the reference point for the projector. The default values in the menu are based on the average for all projectors.
- 2 After measuring the values for all the projectors to be matched, calculate the target values.
- 3 Enter the target values for x, y and gain for each color into the Target Data menu.



- Manual Adjustment
  - 1 Adjust color slide bars and judge image color by eye or meter. A user-defined color "adjustment" can be applied.
  - 2 Use this submenu if you do not have specific color coordinates in mind and will judge color performance by eye or meter. As for Meter Adjustment, each color control actually defines new x/y coordinates for that color and changes its hue. The main colors (red part of red, green part of green and blue part of blue) adjust the intensity of that color component, while the modifying colors (e.g. green part of red and blue part of red) modify the x and y value and change the hue of that color. At the same time the main colors also are used to control the color of the white point.

### Hot-Key Settings

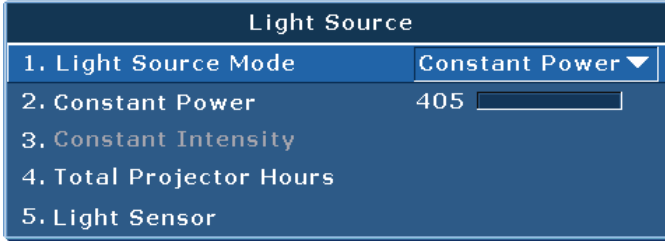
Assign a different function to the hot-key on the remote control by highlighting the function in the list and pressing ENTER. Choose a function that does not already have a dedicated button, and assign the hot-key to that function, allowing you to quickly and easily use the chosen function.

### Service

- Projector Info: Display current projector settings (read-only).
- Factory Reset: Restore all settings to their default value. It will not reset network but it will reset RS232.
- Test Pattern: Choose the desired internal test pattern to display, or select OFF to turn off a test pattern.
- Phosphor Index: The Phosphor index synchronizes the phosphor wheel with the filter wheel and DMD. The index defines the delay between the wheel and the DMD. When the Phosphor index is adjusted, it will impact the smoothness and contouring of the R/G/B gray level.
- Filter Index: The Filter index synchronizes the filter wheel with the phosphor wheel and DMD. The index defines the delay between the wheel and the DMD. When the filter index is adjusted, it will impact the smoothness of the white color space without contouring, similar to the phosphor index behavior.
- Error log: Show the projector error log for debug.
- Mode Adjustment: Fine tune the H and V start position for a signal in the EDID timing table and record the values in the system to override the timing table. The settings must be "Saved to Record" before exiting the menu, or they will be lost. To revert to original timing table settings, each setting must be manually cleared. Factory Defaults will not clear these override settings.
- Laser Diode Info: Display current laser banks status and temperature information.
- High ambient temperature warning: Show the warning message the when the ambient temperature is over 35°C.



## 4.4 Light Source



### Light Source Mode

Select Constant Power, Constant Intensity or ECO mode. When in ECO mode, the projector will adjust to the lowest fan speed and switch the laser diode power to the minimum setting.

### Constant Power

Set the value of the laser diode power (in Watts).

### Constant Intensity

Set the value for the Constant Intensity to maintain constant brightness. The light sensor will monitor the light level and will apply more power as the laser brightness decays naturally over time. When the laser setting reaches maximum power of 405W, it will remain at this setting. Note that the light sensor needs to be calibrated for Constant Intensity mode to work properly. Calibration should be performed again after every lamp change.

### Total Projector Hours

Display current total hours the projector used.

### Light Sensor

Calibrate light sensor.

**4.5 Status Menu**

The read-only Status menu lists a variety of details about the standard and optional components currently detected in the projector.

**For DHD Models**

Status	
Model Name	DHD555-GS
Serial Number	G7YYWW000
Native Resolution	1920 x 1080
Firmware	V03, A01, N01
Main Input	VGA
Main Signal Format	720p
Main Pixel Clock	74.256MHz
Main Sync Type	Sync on Green
Main Horz Refresh	45.10kHz
Main Vert Refresh	60.0Hz
PIP/PBP Input	-
PIP/PBP Signal Format	-
PIP/PBP Pixel Clock	-
PIP/PBP Sync Type	-
PIP/PBP Horz Refresh	-
PIP/PBP Vert Refresh	-
Light Source Power	405 W
Total Projector Hours	70
Standby Mode	0.5 W Mode
Lens Lock Settings	Allow
IP Address	192.168.0.100
DHCP	No
System Temperature	38°C

## For DWU Models

Status	
Model Name	DWU555-GS
Serial Number	G8YYWW000
Native Resolution	1920 x 1200
Firmware	V03, A01, N01
Main Input	VGA
Main Signal Format	720p
Main Pixel Clock	74.256MHz
Main Sync Type	Sync on Green
Main Horz Refresh	45.10kHz
Main Vert Refresh	60.0Hz
PIP/PBP Input	-
PIP/PBP Signal Format	-
PIP/PBP Pixel Clock	-
PIP/PBP Sync Type	-
PIP/PBP Horz Refresh	-
PIP/PBP Vert Refresh	-
Light Source Power	405 W
Total Projector Hours	70
Standby Mode	0.5 W Mode
Lens Lock Settings	Allow
IP Address	192.168.0.100
DHCP	No
System Temperature	38°C

**For DWX Models**

Status	
Model Name	DWX555-GS
Serial Number	G6YYWW000
Native Resolution	1280 x 800
Firmware	V03, A01, N01
Main Input	VGA
Main Signal Format	720p
Main Pixel Clock	74.256MHz
Main Sync Type	Sync on Green
Main Horz Refresh	45.10kHz
Main Vert Refresh	60.0Hz
PIP/PBP Input	-
PIP/PBP Signal Format	-
PIP/PBP Pixel Clock	-
PIP/PBP Sync Type	-
PIP/PBP Horz Refresh	-
PIP/PBP Vert Refresh	-
Light Source Power	405 W
Total Projector Hours	70
Standby Mode	0.5 W Mode
Lens Lock Settings	Allow
IP Address	192.168.0.100
DHCP	No
System Temperature	38°C

## 4.6 Input Switching & PIP Menu

Input Switching & PIP	
1. Main Input	VGA
2. PIP/PBP Input	BNC
3. PIP/PBP Enable	<input checked="" type="checkbox"/>
4. Swap	▶
5. Size	Median
6. Layout	Top Right
7. Timing Detection Mode	Wide
8. Source Info	▶
9. Enable Main Source Hot-Key	<input checked="" type="checkbox"/>
10. Source Hot-Key	▶
11. Input Key	▶
12. Blank on Signal Switch	▶

### Main Input

From the list of active inputs, select one to be used as the main image.

### PIP/PBP Input

From the list of active inputs, select one to be used as the PIP/PBP.

### PIP/PBP Enable

Toggle between displaying two sources at once (Main and PIP/PBP images) or one source only. The check box turns the PIP/PBP source ON and OFF. Refer to Section 6.2 for the Main and PIP/PBP compatibility table.

### Swap

Change the main image to PIP/PBP, and the PIP/PBP to main image. Swapping is available only when PIP/PBP is enabled.

### Size

Select the PIP/PBP size to small, medium or large.

### Layout

Set the location of the PIP/PBP image on the screen.

**NOTE:**

- ✦ PIP/BPB layout and size table as described below.
- ✦ P : indicates primary source region (lighter color).
- ✦ \* : Both source regions are the same size.

PIP/BPB Layout	PIP/BPB Size		
	Small	Medium	Large
PBP, Bigger Left			
Over-Under, Bigger Upper			
PBP, Bigger Right			
Over-Under, Bigger Lower			
PIP-Bottom Right			
PIP-Bottom Left			
PIP-Top Left			
PIP-Top Right			

### Timing Detection

Select timing detection mode to wide or normal. It is used to support additional PC timings. When the projected picture is not completed, this function is used to adjust the picture. "Normal mode" can support all of the 4:3 input sources. "Wide mode" can support all of the 16:9 input source & most of the 4:3 input source. For those 4:3 input sources not recognized by "Wide mode" (example 1400 x 1050), perform Auto Image using "normal mode".

### Source Info

Display current source settings (read-only).

### Enable Source Hot-Key

Toggle the check box to enable or disable the main source hot-key.

### Source Hot-Key

Allows you to assign a different source to the hot-key. Highlight an input and press ENTER to choose a different one.

Input Key

Use it to list all of the sources or change the sources.

Blank on Signal Switch

When the function is enabled, the projector will blank the screen before timing is stable when change source.

## 4.7 Language Menu

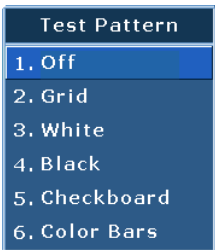
Allows you to select an available language for the OSD display.



## 4.8 Test Pattern Menu

Choose the desired internal test pattern to display, or select OFF to turn off a test pattern.

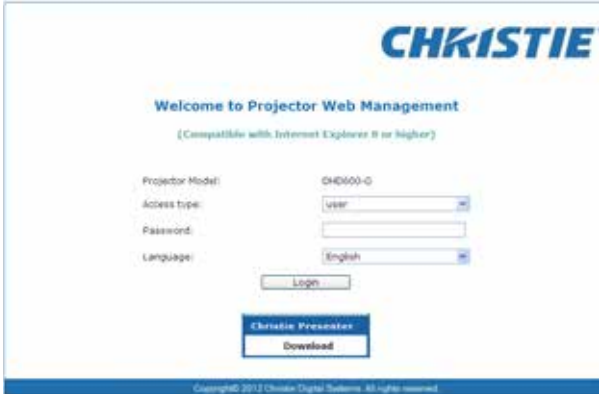
- OFF
- Black
- White
- Checkerboard
- Grid
- Color Bars



### 4.9 Web User Interface

#### 4.9.1 Logging On

Open your web browser and type the IP address (in the address bar) assigned to your projector.



- 1 Select the log in level from the Access type drop-down list
- 2 Enter the Password in the Password field
- 3 Select the appropriate language from the Language drop-down list.
- 4 Click the Press login button. The Main window appears.

#### 4.9.2 Main Tabbed Page - General

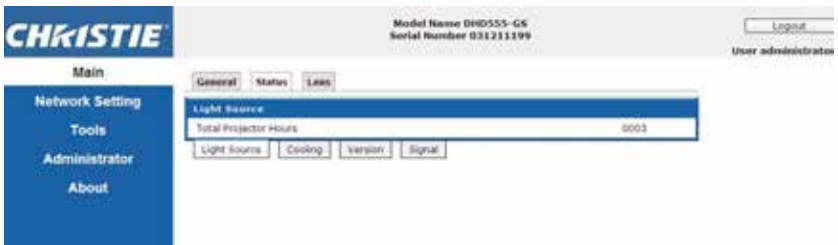




- Control Panel  
Select main source / PIP source, enable/disable PIP/PBP, change the layout / PIP size, swap, and change the test pattern.
- Projector Information Panel  
Check the projector information for power status, Pic mute status, OSD status, IP address and Mac address.
- Switch Panel  
Switch the on/off status of power, Pic mute, and OSD.

### 4.9.3 Main Tabbed Page - Status

Display the current status of light source, cooling (fans), version numbers and signal (source) information



### 4.9.4 Main Tabbed Page - Lens

Control the focus, lens shift and zoom adjustments for the lens.



4.9.5 Network

CHRISTIE

Model Name DM0553-GS  
Serial Number 031211199

Login Over administrator

Main

Network Setting

Tools

Administrator

About

Project Name

Show Network Messages  On  Off

Factory Network...

Network Factory Reset...

LAN

DHCP  Manual

IP Address

Subnet Mask

Default Gateway

MAC Address

WLAN

Enable  Disable

Start IP

End IP

Subnet Mask

Default Gateway

MAC Address

SNMP

SNMP Read Community

SNMP Location

Trap IP Address

Trap Email 1

Trap Email 2

Email Host Address

SNMP Server IP Address

Please press Enter key after modifying

Trap Configurations

Light Source Life

Light Source Fault

Fan Stall

Thermal Sensors

Power

Signal Lost/Detected

Credential Control System

IP Address

IP ID

Port

**Note**  
If you change the setting, the projector's network subsystem will restart, and you will be logged off.

- Restart Network  
Execute a Network restart. This will not change any of the network settings.
- Network Factory Reset  
Execute a network factory reset. Network settings will be reset to the following default values:
  - Projector Name = Christie@ + Serial Number
  - Show Network Messages = ON
  - LAN Settings:
    - Manual
    - IP Address = 192.168.0.100
    - Subnet Mask = 255.255.255.0
    - Default Gateway = 192.168.0.100
  - WLAN Settings:
    - Enabled
    - Start IP = 192.168.1.100
    - End IP = 192.168.1.120
    - Subnet Mask = 255.255.255.0
    - Default Gateway = 192.168.1.100
  - SNMP Settings:
    - SNMP Read Communication = private
    - Trap IP Address = 0.0.0.0
    - SMTP IP Address = 0.0.0.0
    - All other settings are cleared/blanked
  - Trap Configuration:
    - All items = SNMP Trap + Email
- LAN Setting Panel
  - Select if the projector must obtain an automatically assigned IP address through DHCP or if the user will set the address manually.
  - Enter the IP address, netmask, and default gateway address for the TCP/IP setting.
- WLAN Setting Panel
  - Select if the wireless LAN of the projector is enabled or disabled.

- Enter the IP address range, netmask and default gateway for the wireless LAN.
- **SNMP Panel**
  - The SNMP (Simple Network Management Protocol) interface provides network administrators with a common way to manage their network devices from a single remote location. SNMP allows an administrator to query a number of devices to see their current status/ configuration. It also allows operators to change configuration values and configure trap notifications to be sent when certain events occur. (eg. Loss of signal, power state change, etc)
    - ▶ Emails are sent to the mail server configured in the projector settings. Up to 2 user email accounts can be selected. Any important information regarding the event will be located in the body content of the email.
    - ▶ SNMP Traps are notifications that are sent from the projector. They are only received by a trap receiver (MIB Browser) in the computer.
  - SNMP Read Community (default setting: private) - this is a plain- text password. This must also be entered in the MIB browser. This password allows the various settings in the projector to be queried.
  - SNMP Location (default setting: blank) - This field can be used as a description to where a projector is located in a building. SNMP emails sent will specify this location.
  - Trap IP Address (default setting: 0.0.0.0) - This field must be filled in to receive Traps from the projector. The Trap IP Address should be filled in with the IP Address of the computer on which you would like to view received traps.
  - Trap Email 1/2 (default setting: Blank) - The Trap Email 1 and 2 must be set to an email address that is configured under the mail server that you will enter in the "SMTP Server IP Address" field.
  - Email from Address (default setting: blank) - the "Email from Address" that will appear as the source of the SNMP emails.
  - SMTP Server IP Address (default setting: 0.0.0.0) - Enter your mail server's IP address.
- **Trap Configuration Panel**

Set the SNMP actions for the system events. The dropdown options are: SNMP Trap + Email, Email, SNMP Trap, and Disabled.
- **Crestron Control System Panel**

Enter the IP address, IP ID, and Port of Crestron device for connection.

**4.9.6 Tools**

To Use the Tools tabbed pages to control "Size & Position", "Image Settings", "Configuration", "Light Source", "Input Switching & PIP" and "Test Pattern".



**4.9.7 Administrator Page**

Add or delete a user or change password



## 4.9.8 About Page

The screenshot shows the Christie web interface. At the top left is the Christie logo. To its right, the model name 'DHD555-GS' and serial number '831211599' are displayed. In the top right corner, there is a 'Logout' button and the text 'User administrator'. On the left side, there is a vertical navigation menu with the following items: 'Main', 'Network Setting', 'Tools', 'Administrator', and 'About' (which is highlighted in blue). In the center, there are two tabs: 'Version' (selected) and 'License'. Below the 'Version' tab is a table titled 'Version Information' with the following data:

Version Information	
Main Firmware	V03.08
Network Firmware	N00.43
Projector model name	DHD555-GS
Projector serial number	831211599

- **Version Tab**  
View the main firmware version, network firmware version, projector model name, and projector serial number.
- **License Tab**  
The license information of the computer program is displayed.

## 4.10 Christie Presenter

The Christie Presenter application allows a remote desktop from a host PC to be displayed on the network display through Ethernet, USB, or wireless transports. It can adapt to different network settings (DHCP, fixed IP, and direct link by USB/Ethernet cable).

Christie Presenter can be downloaded from the Christie website or from the web page of the projector.

### 4.10.1 Connect to the Projector

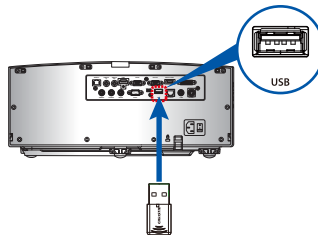
#### 1. Connect to the projector using WiFi or Ethernet

##### - Ethernet connection:

- ▶ Determine the projector's IP address from the menu Main Menu > Configuration > Communications > LAN

LAN	
1. DHCP	<input type="checkbox"/>
2. IP Address	192.168.0.100
3. Subnet Mask	255.255.255.0
4. Default Gateway	192.168.0.254
5. MAC Address	00:08:18:00:35:18

- ▶ Configure your PC IP address to be on the same network as the projector.
  - ▶ The projector and computer must be connected directly or over the network via Ethernet.
- ##### - WiFi Wireless connection:
- ▶ Insert the WiFi USB dongle (1DWUSB-BGN) into the USB port on the projector input panel.



Insert the WiFi USB dongle



- ▶ Power on the Projector.
- ▶ Obtain the WiFi SSID from the OSD menu Main Menu > Configuration > Communications > WLAN
- ▶ Connect your PC device to the wireless SSID for the selected projector . Example: "Christie@0111000123".

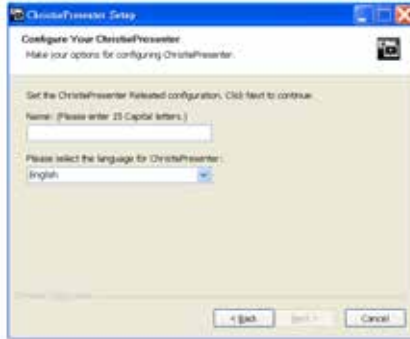


4.10.2 Install Christie Presenter software

1. Use a web browser to connect to the projector's network address (Default address 192.168.1.100)
2. Download and install the Christie Presenter Software



3. Configure the Christie Presenter Software. The name entered is used to identify all computers connected to the projector via the Christie Presenter software via either wired or wireless connections. The Network Display Management -> Device Management tab will show all current connections.









#### 4.10.3 Use Christie Presenter

1. Press the autorun icon in the system tray to pause or play the USB display.




2. After starting the Christie Presenter application, the main window can be seen (shown below).

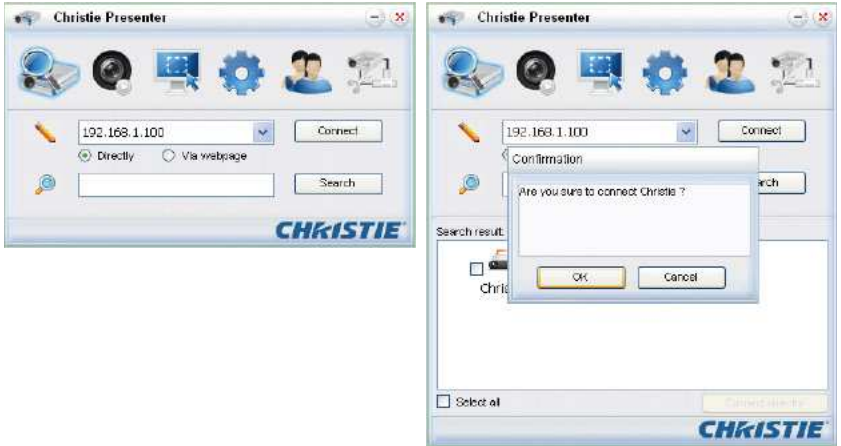


Icon	Description
	Connect and search network display
	Stop/start displaying desktop contents to connected network display
	Select display region
	Configure Christie Presenter
	Manage all connected network displays
	Disconnect all connections

***Connect and search network display***

- 1 Click the button  to enter into the connection menu section.


- If the IP address of the projector is known, enter the IP address and click the "Connect" button. If the IP address is not known, click the "Search" button to search for the projector on the network and select the projector to which you want to connect. Select the option "Directly" in order to proceed to the log in interface.



- Input "User type" and "Password" in the log-in interface. Select the display port (the default is full screen). Obtain the "Normal" user's password from the OSD menu Main Menu > Configuration > Communications > WLAN.




### Select display region

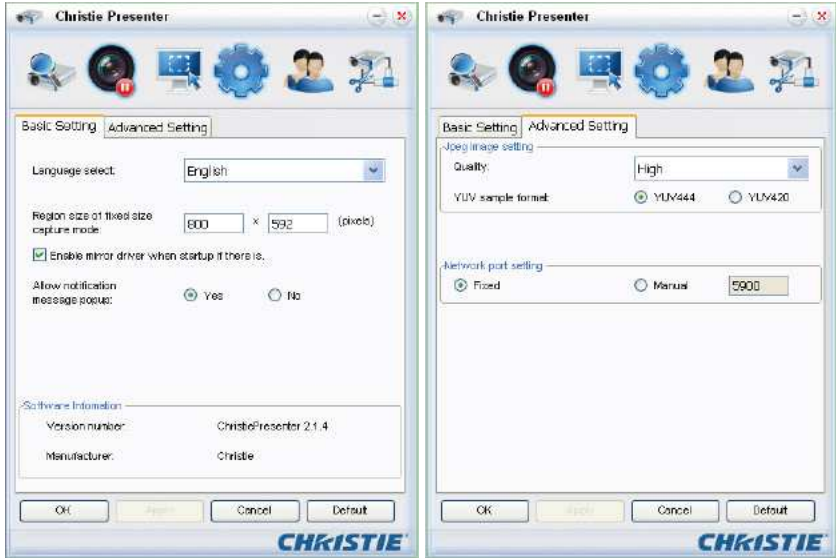
Once the connection is set up, click the button  to select the size of the projection region: FullScreen, FixedSize, or Alterable.



- **FullScreen:** The default capture mode turns to Full screen when the program is launched. At that time, if screen capture starts, the image of the whole screen is transferred to a remote network display.
- **FixedSize:** FixedSize mode allows the users to place a frame on the desktop. Only the image enclosed inside the frame is transferred to remote network display.
- **Alterable:** In Alterable mode the only region captured is the one enclosed by the frame. The region can be enlarged or downsized by dragging the eight small black squares scattered on eight edges of the frame.


### Configure Christie Presenter

Click the button  to configure Christie Presenter for Basic Setting and Advanced Setting.












- Basic Setting: Select language, change the region size of fixed size capture mode, and select if notification message popup is allowed.
- Advanced Setting: Select the quality of JPEG image, YUV sample format and network port setting. (The "Fixed" port is Port 5900)

**Manage all connected network displays**

Click the button  to control all the users and all the projectors connector to the same projector.



Icon	Description
	Administrator log in.
	Normal user log in.
	Device is connected.
	Device is not connected.
	The icon shows the current status and display position of the local screen on the network display. Click on the icon to change the display position. A dialog box will appear.
	Click this unlock icon to change the password. (Password change to target network display. Only an Administrator user can change the password.)
	No response is expected when this icon is clicked. If user log in as "Admin", the key icon can be seen and the Presenter password can be changed. If user log in as "Normal", the lock icon can be seen and the Presenter password can't be changed.
	Disconnect from target network display.
	Link for connecting to a target network display via a webpage.

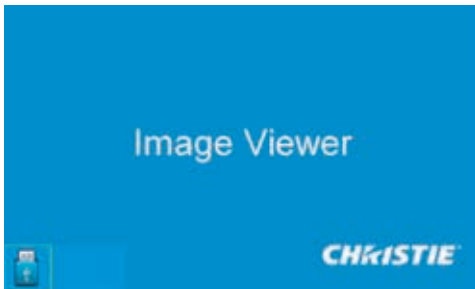
## 4.11 Card Reader Operation

There are four operation modes in the Card Reader application:

- USB Flash Devices Detection Screen
- Thumbnail Display Mode
- Images Display Mode
- Images Slide Show Mode

### 1. USB Flash Device Detection Screen:

In this mode, the Card Reader application detects any USB flash devices hot-plug events and displays the flash device icon. When the flash device is removed from USB, the icon disappears. It is suggested that USB flash devices should be removed only when the Card Reader is changed to the USB Flash Devices Detection Screen state.



### 2. Thumbnail Display Mode:

Press the Enter key to enter the Thumbnail Display Mode. Different photos in different folders can be chosen. Press the Menu key to bring up the Card Reader operation UI.





The user interface is designed to operate the card reader application with a few keys (Enter/Left/Right/Up/Down).

The following buttons are supported in the user interface:

- Previous: Move the selected item left. (Go to previous page when this is the leftmost item)
- Next: Move the selected item right. (Go to next page when this is the rightmost item.)
- Display: Display the selected image or display the selected folder.
- Thumbnail: Enter the Thumbnail Display Mode.
- SlideShow: Enter the Slide Show Mode.
- NameOrder: Sort files/folders in name order.
- ExtendOrder: Sort files/folders in extended order.
- SizeOrder: Sort files/folders in size order.
- TimeOrder: Sort files/folders in time order.
- EXIF ON/OFF: Enable/Disable auto image rotate accordingly to EXIF information.
- FileName ON/OFF: Enable/Disable filename display in Thumbnail Display Mode.

### 3. Image Display Mode:

Press the ENTER key in the Thumbnail Display Mode to enter the Image Display Mode; press the SlideShow key to enter the Slide Show Mode. The Left/Right key is used to display the last/next image in the Image Display Mode. In the Image Display Mode, press the ENTER key to quit from the Image Display Mode and enter the Thumbnail Display Mode.

In the Slide Show Mode, press the ENTER key to enter the Image Display Mode.



The alternative way to display image in the Image Display Mode or Slide Show Mode is using the operation UI.

The following operations are supported in the operation UI.

- Display: Enter the Image Display Mode.
- Thumbnail: Enter the Thumbnail Display Mode.
- SlideShow: Enter the Slide Show Mode.
- Actual Size: Display in actual size of the image.
- Best Fit: Display the image in best fit to the screen.
- EXIFDisp OFF/On: Enable/Disable EXIF information display.
- +90deg: Rotate 90 degree.
- -90deg: Rotate -90 degree.



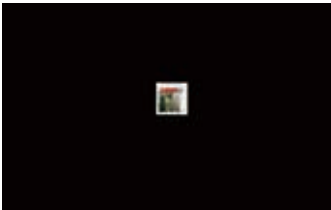
#### 4. Image Slide Show Mode:

The following operations are supported in the Slide Show Mode operation UI.

- Stop: Stop Slide Show Mode.
- Next: Display next image.
- Previous: Display previous image.
- Delay 3/4/5: Slide Show delay in seconds.
- Slide Effect: Following modes are supported.
  - Slide Right
  - Blocks
  - RightDown
  - XLines
  - Slide Up
  - Ylines
  - Repeat ON/OFF: Enable/Disable Slide Show Repeat Mode.



When the image can NOT be displayed due to memory limitation or can NOT support image format, the specific image is displayed on the center of the screen.





## 5. TROUBLESHOOTING

If you are unable to resolve an issue using the information provided in this section, contact your reseller or service center.

Problem	Solution
<ul style="list-style-type: none"> <li>- No image appears on-screen</li> </ul>	<ul style="list-style-type: none"> <li>- Make sure all the cables and power connections are correctly and securely connected See "Installation".</li> <li>- Check if the Light Status LED is in Green.</li> <li>- Make sure you have removed the lens cap and the projector is switched ON.</li> </ul>
<ul style="list-style-type: none"> <li>• Partial, scrolling or incorrectly displayed image</li> </ul>	<ul style="list-style-type: none"> <li>- Press "AUTO" on control panel or on remote control.</li> <li>- If you are using a PC (for Windows 95, 98, 2000, XP, Windows 7):               <ol style="list-style-type: none"> <li>1. Click the "My Computer" &gt; "Control Panel" and then double - click "Display".</li> <li>2. Select the "Settings" tab.</li> <li>3. Verify that your display resolution setting is lower than or equal to WUXGA (1920 × 1200).</li> <li>4. Click on the "Advanced Properties" button. If the projector is still not projecting the whole image, change the monitor display:                   <ol style="list-style-type: none"> <li>4.1 Verify the resolution setting is lower than or equal to WUXGA (1920 × 1200).</li> <li>4.2 Select the "Change" button under the "Monitor" tab.</li> <li>4.3 Click on "Show all devices". Next, select "Standard monitor types" under the SP box; choose the resolution mode you need under the "Models" box.</li> <li>4.4 Verify that the resolution setting of the monitor display is lower than or equal to WUXGA (1920 × 1200).</li> </ol> </li> </ol> </li> </ul>

Problem	Solution																				
<ul style="list-style-type: none"> <li>- Partial, scrolling or incorrectly displayed image</li> </ul>	<ul style="list-style-type: none"> <li>- If you are using a Notebook:               <ol style="list-style-type: none"> <li>1. Adjust resolution of the computer.</li> <li>2. Press the keys listed below for your notebook manufacturer to send signal out from notebook to projector. Example: [Fn]+[F4]</li> </ol> <table border="1" data-bbox="413 389 997 842" style="margin-left: 20px;"> <thead> <tr> <th>Notebook Brand</th> <th>Function Keys</th> </tr> </thead> <tbody> <tr> <td>Acer</td> <td>[Fn]+[F5]</td> </tr> <tr> <td>Asus</td> <td>[Fn]+[F8]</td> </tr> <tr> <td>Dell</td> <td>[Fn]+[F8]</td> </tr> <tr> <td>Gateway</td> <td>[Fn]+[F4]</td> </tr> <tr> <td>IBM/Lenovo</td> <td>[Fn]+[F7]</td> </tr> <tr> <td>HP/Compaq</td> <td>[Fn]+[F4]</td> </tr> <tr> <td>NEC</td> <td>[Fn]+[F3]</td> </tr> <tr> <td>Toshiba</td> <td>[Fn]+[F5]</td> </tr> <tr> <td>Mac Apple</td> <td>System Preference ⇒ Display ⇒ Arrangement ⇒ Mirror display</td> </tr> </tbody> </table> </li> <li>- If you experience difficulty changing resolutions or your monitor freezes, restart all equipment including the projector.</li> </ul>	Notebook Brand	Function Keys	Acer	[Fn]+[F5]	Asus	[Fn]+[F8]	Dell	[Fn]+[F8]	Gateway	[Fn]+[F4]	IBM/Lenovo	[Fn]+[F7]	HP/Compaq	[Fn]+[F4]	NEC	[Fn]+[F3]	Toshiba	[Fn]+[F5]	Mac Apple	System Preference ⇒ Display ⇒ Arrangement ⇒ Mirror display
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Acer	[Fn]+[F5]																				
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HP/Compaq	[Fn]+[F4]																				
NEC	[Fn]+[F3]																				
Toshiba	[Fn]+[F5]																				
Mac Apple	System Preference ⇒ Display ⇒ Arrangement ⇒ Mirror display																				
<ul style="list-style-type: none"> <li>• The screen of the Notebook or PowerBook computer is not displaying your presentation</li> </ul>	<ul style="list-style-type: none"> <li>- If you are using a Notebook PC Some Notebook PCs may deactivate their own screens when a second display device is in use. Each of them has a different method of reactivation. Please refer to your computer manual for detailed information.</li> </ul>																				
<ul style="list-style-type: none"> <li>• Image is unstable or flickering</li> </ul>	<ul style="list-style-type: none"> <li>- Use "Pixel Track" and "Pixel Phase" to correct it.</li> <li>- Change the monitor color setting on your computer.</li> </ul>																				
<ul style="list-style-type: none"> <li>• Image has vertical flickering bar</li> </ul>	<ul style="list-style-type: none"> <li>- Use "Auto Image" to make an adjustment.</li> <li>- Check and reconfigure the display mode of your graphic card to make it compatible with the projector.</li> </ul>																				

<b>Problem</b>	<b>Solution</b>
<ul style="list-style-type: none"><li>• Image is out of focus</li></ul>	<ul style="list-style-type: none"><li>- Make sure both lens caps (front and back) are removed.</li><li>- Adjust lens focus to fit.</li><li>- Make sure the projection screen is between the required distance.</li></ul>
<ul style="list-style-type: none"><li>• The image is stretched when displaying 16:9 DVD title</li></ul>	<ul style="list-style-type: none"><li>- When you play anamorphic DVD or 16:9 DVD, the projector will show the best image when the projector display mode is set to 16:9 in the OSD.</li><li>- If you play 4:3 format DVD titles, please change the format to 4:3 in the projector OSD.</li><li>- If the image is still stretched, you will also need to adjust the aspect ratio by setting the display format as 16:9 (wide) aspect ratio type on your DVD player.</li></ul>
<ul style="list-style-type: none"><li>• Image is too small or too large</li></ul>	<ul style="list-style-type: none"><li>- Adjust lens zoom to fit.</li><li>- If it does not fill the screen properly, verify that the correct lens is in use or change the position of the projector.</li></ul>





## 6. SPECIFICATIONS

### 6.1 Inputs

Signal Type	Resolution	Frame Rate (Hz)	HDMI	VGA	DisplayPort	DVI	Component	S- video	CVBS
PC	640x350	85	•		•				
	640x400	85	•	•		•			
	640x480	59	•						
	640x480	60	•	•	•	•			
	640x480	72	•	•		•			
	640x480	75	•	•	•	•			
	640x480	85	•	•	•	•			
	720x400	85	•	•		•			
	768x480	60	•						
	768x480	75	•						
	768x480	85	•						
	800x600	50	•		•				
	800x600	56	•	•		•			
	800x600	60	•	•	•	•			
	800x600	72	•	•		•			
	800x600	75	•	•	•	•			
	800x600	85	•	•	•	•			
	848x480	50	•						
	848x480	60	•						
	848x480	75	•						
	848x480	85	•						
	960x600	50	•						
	960x600	60	•		•				
960x600	75	•							

**NOTE:**

❖ "RB" means "reduced blanking".

Signal Type	Resolution	Frame Rate (Hz)	HDMI	VGA	DisplayPort	DVI	Component	S- video	CVBS
PC	960x600	85	•						
	1024x768	60	•	•	•	•			
	1024x768	75	•	•	•	•			
	1024x768	85	•	•	•	•			
	1064x600	50	•						
	1064x600	60	•						
	1064x600	75	•		•				
	1064x600	85	•		•				
	1152x720	50	•						
	1152x720	60	•						
	1152x720	75	•						
	1152x720	85	•		•				
	1152x864	60	•	•			•		
	1152x864	70	•	•			•		
	1152x864	75	•	•			•		
	1152x864	85	•	•			•		
	1280x720	50	•			•			
	1280x720	60	•	•	•	•	•		
	1280x720	75	•	•	•	•	•		
	1280x720	85	•	•	•	•	•		
	1280x768	60	•	•			•		
	1280x768	75	•	•			•		
	1280x768	85	•	•			•		
	1280x800	50	•	•	•	•	•		
	1280x800	60	•	•	•	•	•		
	1280x800	75	•	•			•		
1280x800	85	•	•			•			

Signal Type	Resolution	Frame Rate (Hz)	HDMI	VGA	DisplayPort	DVI	Component	S- video	CVBS
PC	1280x960	60	•	•		•			
	1280x960	75	•	•		•			
	1280x960	85	•	•		•			
	1280x1024	50	•		•				
	1280x1024	60	•	•	•	•			
	1280x1024	75	•	•	•	•			
	1280x1024	85	•	•	•	•			
	1360x768	50	•						
	1360x768	60	•						
	1360x768	75	•						
	1360x768	85	•						
	1366x768	60	•	•	•	•			
	1400x900	60	•	•	•	•			
	1400x1050	50	•		•				
	1400x1050	60	•	•	•	•			
	1400x1050	75	•	•		•			
	1440x900	60	•	•		•			
	1440x900	75	•						
	1600x900	60	•						
	1600x1200	50	•						
	1600x1200	60	•	•	•	•			
	1680x1050	50	•		•				
	1680x1050	60	•	•	•	•			
	1680x1050	75	•						
	1704x960	50	•						
	1704x960	60	•						
	1728x1080	50	•						

Signal Type	Resolution	Frame Rate (Hz)	HDMI	VGA	DisplayPort	DVI	Component	S- video	CVBS
PC	1728x1080	60	•						
	1864x1050	50	•						
	1864x1050	60	•						
	1920X1080	50	•		•				
	1920X1080	60	•	•		•			
	1920X1200RB	60	•	•	•	•			
	1920X1200RB	50	•	•	•	•			
NTSC	NTSC (M, 4.43)	60						•	•
PAL	PAL (B,G,H,I)	50						•	•
	PAL (N)	50						•	•
	PAL (M)	60						•	•
SECAM	SECAM (M)	50						•	•
EDTV	480i	60	•	•		•	•		
	576i	50	•	•		•	•		
	480p	60	•	•		•	•		
	576p	50	•	•		•	•		

Signal Type	Resolution	Frame Rate (Hz)	HDMI	VGA	DisplayPort	DVI	Component	S- video	CVBS
HDTV	1080i	25	•	•		•	•		
	1080i	29	•	•		•	•		
	1080i	30	•	•		•	•		
	720p	50	•	•		•	•		
	720p	59	•	•		•	•		
	720p	60	•	•		•	•		
	1080s	23	•				•		
	1080s	24	•				•		
	1080p	23	•	•		•	•		
	1080p	24	•	•		•	•		
	1080p	25	•	•		•	•		
	1080p	29	•	•		•	•		
	1080p	30	•	•		•	•		
	1080p	50	•	•		•	•		
	1080p	59	•	•		•	•		
	1080p	60	•	•		•	•		

**6.2 PIP/PBP Compatibility**

Main \ PIP/PBP	HDMI	VGA	Component	CVBS	S-Video	HDBaseT	Display-Port	USB A	USB MINI-B	RJ45	DVI-D
HDMI	-	-	-	-	-	-	•	•	•	•	•
VGA	-	-	-	-	-	-	•	•	•	•	•
Component	-	-	-	-	-	-	•	•	•	•	•
CVBS	-	-	-	-	-	-	•	•	•	•	•
S-Video	-	-	-	-	-	-	•	•	•	•	•
HDBaseT	-	-	-	-	-	-	•	•	•	•	•
DisplayPort	•	•	•	•	•	•	-	-	-	-	-
USB A	•	•	•	•	•	•	-	-	-	-	-
USB MINI-B	•	•	•	•	•	•	-	-	-	-	-
RJ45	•	•	•	•	•	•	-	-	-	-	-
DVI-D	•	•	•	•	•	•	-	-	-	-	-

• : PIP/PBP combinations are enabled  
 - : PIP/PBP combinations are disabled

### 6.3 Key Features

- WXGA 0.65" 1280 x 800 or HD 0.65" 1920 x 1080 resolution or WUXGA 0.67" 1920 x 1200 resolution
- Projection lens compatibility:
  - Horizontal offset ranges: +/-30%
  - Vertical offset ranges: +/-100% (WUXGA/WXGA) and +/-120% (HD)
- **NOTE:**
  - ✧ *Measurements are based on industry standards where offset is calculated as a ratio of the number of pixels shifted up/down to half the image size.*
- Dual Processing Warp Module for edge blending and geometric correction. (Optional)
- Wireless desktop display using wireless dongle (optional)
- SNMP traps and e-mail notifications
- 10-bit image processor electronics with modular design
- All video formats can be resized to full screen either horizontally or vertically while maintaining aspect ratio
- The projector can be operated using any of the following:
  - The built-in keypad, an infrared (IR) remote control, a wired remote control, a PC/device using serial communications (Ethernet or RS232)
  - A Web page via Ethernet or from a PC/device via a wireless USB dongle. (Optional)
- Weight:
  - Maximum product weight (with lens removed): 15kg (33lb.)
- Built-In keypad

## 6.4 List of Components

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

- IR remote control 003-004468-01
- Power cord x 4
  - UK/Korea/Russia
  - North America
  - Europe
  - Japan
- DVI to HDMI dongle
- User manual (CD)

**NOTE:**

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

## 6.5 Optional Accessories

- Cable cover (140-103105-01)
- Standard Lens (A05) (140-100102-01)
- Optional Lens (A01) (140-101103-01)
- Optional Lens (A03) (140-102104-01)
- 1DWUSB-BGN / Wireless dongle (optional accessory) (133-113106-01)
- Dual Processor Warp Module (optional accessory) (133-111104-01)
- Portrait Side Cover (140-108100-01)



**6.6 REGULATORY**

- Safety
  - CSA C22.2 No. 60950-1
  - UL 60950-1
  - IEC 60950-1
  - EN 60950-1
- Electro-Magnetic Compatibility

**Emissions**

- FCC CFR47, Part 15, Subpart B/ANSI C63.4, Class A - Unintentional Radiators
- CISPR 22/EN55022 Class A - Information Technology Equipment
- ICES/NMB003 (A) - Information Technology Equipment

**Immunity**

- CISPR 24/EN55024 EMC Requirements - Information Technology Equipment
- Environmental
- The product conforms to:
  - EU Directive (2011/65/EU) on the restriction of the use of certain hazardous substances (RoHS) in electrical and electronic equipment and the applicable official amendment(s).
  - EU Regulation (EC) No. 1907/2006 on the registration, evaluation, authorization and restriction of chemicals (REACH) and the applicable official amendment(s).
  - EU Directive (2012/19/EU) on waste and electrical and electronic equipment (WEEE) and the applicable official amendment(s).
  - China Ministry of Information Industry Order No.39 (02/2006) on the control of pollution caused by electronic information products, the hazardous substances concentration limits (SJ/T11363-2006), and the applicable product marking requirement (SJ/T11364-2006).
- Marking
  - This product conforms to all relevant Canadian, US, and European directives, standards, safety, health and environmental concerns. International packaging recycling marks conform to:
    - ▶ EU Directive (2012/19/EU) on waste and electrical and electronic equipment (WEEE) .
    - ▶ EU Directive (94/62/EC) on packaging and packaging waste
    - ▶ China packaging recycling mark standard (GB18455-2001)

## 6.7 Federal Communications Commission (FCC) Warning

**⚠ WARNING**

- A shielded-type power cord is required in order to meet FCC emission limits and also to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord be used.
- Use only shielded signal cables to connect I/O devices to this equipment.

6.8 OSD Tree

Level 1	Level 2	Level 3(Or List)	Level 4(Or List)	Level 5(Or List)	Level 6(Or List)	Default		
Size & Position	Size Presets	Auto				Auto		
		Native						
		4:3						
		Letterbox						
		Full Size						
		Full Width						
		Full Height						
	Overscan	Custom						
		Off				By source set		
		Zoom						
	Crop							
	Pixel Track	0 - 100				50		
	Pixel Phase	0 - 100				50		
	Horz Position	0 - 100				50		
	Vert Position	0 - 100				50		
	Digital Horz Zoom	50%~400%				100		
	Digital Vert Zoom	50%~400%				100		
	Digital Horz Shift	0 - 100				50		
	Digital Vert Shift	0 - 100				50		
	Geometry Correction	Basic	Off				Off	
			Horz Keystone	0 - 100 (0-20 for GEO model)			50 (10 for GEO model)	
				Vert Keystone	0 - 100 (0-20 for GEO model)			50 (10 for GEO model)
			Horz Pincushion	0 - 100			50	
				Vert Pincushion	0 - 100			50
			Pincushion/Barrel	0-20			10	
			4-Corner	Basic	Top Left Horz adjust.		0-140	0
					Top Left Vert adjust.		0-80	0
					Top Right Horz adjust.		0-140	0
					Top Right Vert adjust.		0-80	0
					Bottom Left Horz adjust.		0-140	0
					Bottom Left Vert adjust.		0-80	0
					Bottom Right Horz adjust.		0-140	0
		Bottom Right Vert adjust.		0-80	0			
		Curve	Curve	Top Arc		0-300	150	
				Bottom Arc		0-300	150	
Left Arc					0-300	150		
Right Arc					0-300	150		
4-Corner			Curve	Top Left Horz adjust.		0-140	0	
				Top Left Vert adjust.		0-80	0	
	Top Right Horz adjust.				0-140	0		
Top Right Vert adjust.		0-80	0					

Level 1	Level 2	Level 3(Or List)	Level 4(Or List)	Level 5(Or List)	Level 6(Or List)	Default		
Size & Position	Geometry Correction	Curve	4-Corner	Bottom Left Horz adjust.	0-140	0		
				Bottom Left Vert adjust.	0-80	0		
				Bottom Right Horz adjust.	0-140	0		
				Bottom Right Vert adjust.	0-80	0		
		Rotate	4-Corner	Rotation		0-16		8
				Top Left Horz adjust.		0-140		0
				Top Left Vert adjust.		0-80		0
				Top Right Horz adjust.		0-140		0
				Top Right Vert adjust.		0-80		0
				Bottom Left Horz adjust.		0-140		0
				Bottom Left Vert adjust.		0-80		0
				Bottom Right Horz adjust.		0-140		0
		Bottom Right Vert adjust.		0-80		0		
		Auto Image						
		Brightness	0 - 100				50	
		Contrast	0 - 100				By source set	
Color Space	Auto					Auto		
		RGB	RGB			RGB		
	RGB		RGB Video					
			REC709					
			REC709					
			REC601				REC709	
	YUV							
Detail	Maximum					By source set		
	High							
	Normal							
	Low							
	Minimum							
Video Options	Color	0 - 100				50		
	Tint	0 - 100				50		
	Noise Reduction	0 - 100				0		
	Flesh Tone Correction	0 - 100				0		
	Video Black Level							
	Detect Film	Off/On				Off		
		Off						
	Closed captions		cc1				Off	
			cc2					
	Input Levels	Red Gain	0 - 100				50	
Green Gain		0 - 100				50		
Blue Gain		0 - 100				50		
Red Offset		0 - 100				50		
Green Offset		0 - 100				50		
Blue Offset		0 - 100				50		
Sync Threshold		0 - 100				50		
Reset RGB Gain/Offset								

Level 1	Level 2	Level 3(Or List)	Level 4(Or List)	Level 5(Or List)	Level 6(Or List)	Default	
Image settings	Picture Settings	Presentation				By source set	
		Video					
		Bright					
		Real					
		DICOM SIM					
	Save to User	User					
	Image Freeze	Off / On				Off	
	Advanced Image Settings	Gamma	Video				By source set
			Film				
			Bright				
			CRT				
			DICOM				
		White Peaking	0 - 100				By source set
		Color Temperature	Warmest				By source set
			Warm				
Cool							
Edge Enhancement		Bright				Off	
	Off						
Color Enhancement	Normal				Off		
	Maximum						
	Off						
Configuration	Language					English	
	Lens settings	Focus	command				
		Zoom	command				
		Lens Shift	command				
		Lock all Lens Motors	Allow				Allow
			Locked				
	Lens center calibration	command					
	Ceiling Mount	Off/On/Auto				Auto	
	Rear Projection	Off/On				Off	
	Menu Preferences	Menu Horz Offset	0 - 100				0
		Menu Vert Offset	0 - 100				0
		Show Messages	off/on				
		Menu Transparency	0 - 90				0
		Splash Screen Setup	Factory Logo				Factory Logo
			Blue				
Black							
PIN Protect		command					
Change PIN	command						

Level 1	Level 2	Level 3(Or List)	Level 4(Or List)	Level 5(Or List)	Level 6(Or List)	Default	
Configuration	Power Management	Standby Mode	0.5 W Mode Communication Mode			Communication mode	
		AC Power On	off/on			Off	
		Auto shutdown	Never				20 Mins
			5 Mins				
			10 Mins				
			15 Mins				
			20 Mins				
			25 Mins				
		Sleep Timer	30 Mins				Off
			Off				
	2 Hrs						
	4 Hrs						
	High Altitude	Off/On				Off	
	Communications	LAN	DHCP			by set	
			IP Address				
			Subnet Mask				
			Default Gateway				
			MAC Address				
		WLAN	Enable			by set	
			Start IP				
			End IP				
			Subnet Mask				
			Default Gateway				
			MAC Address				
		Network	SSID			by set	
			Password				
			Projector Name				
			Show Network Messages				
			Restart Network...				
			Network Factory Reset...				
	Serial Port Baud Rate	2400			115200		
4800							
9600							
14400							
19200							
38400							
57600							
115200							
Serial Port Echo	Off/On			Off			
Serial Port Path	RS232			RS232			
	HDBaseT						
Projector Address	0 - 9			0			
Image Blending	Blending	On/Off			Off		
	Marker	On/Off			Off		
	Grid	Off/White/Red/ Green/Blue			Off		
	Solid Color	Off/White/Red/ Green/Blue			Off		

Level 1	Level 2	Level 3(Or List)	Level 4(Or List)	Level 5(Or List)	Level 6(Or List)	Default		
Configuration	Image Blending	Overlap	TOP	0... ½ Output Height(Pixel)		0		
			Bottom	0... ½ Output Height		0		
			Left	0... ½ Output Width		0		
			Right	0... ½ Output Width		0		
		Bright Adj.	Blending Area offset	0-2000		1000		
			non-Blending Area Offset	0-2000		1000		
		Drop Off Curve	70-300			100		
	Image Gamma	1.8/2.0/2.2/2.4/2.6			2.2			
	Color Matching	Meter Adjustment	Enable		On/Off		Off	
			Auto Test Pattern		On/Off		On	
			Measured Data	Intensity of Red		100 - 10000		544
				x of Red		0.300 - 0.700		0.590
				y of Red		0.300 - 0.500		0.383
				Intensity of Green		100 - 10000		2103
				x of Green		0.300 - 0.400		0.314
				y of Green		0.400 - 0.700		0.620
				Intensity of Blue		100 - 10000		124
				x of Blue		0.100 - 0.300		0.146
				y of Blue		0.030 - 0.400		0.030
				Intensity of White		100 - 10000		6772
				x of White		0.200 - 0.400		0.305
				y of White		0.200 - 0.400		0.333
			Reset to Default		Yes/No			
			Target Data	Gain of Red		0.200 - 1.000		1.000
				x of Red		0.300 - 0.700		0.615
				y of Red		0.300 - 0.500		0.381
				Gain of Green		0.200 - 1.000		1.000
				x of Green		0.300 - 0.400		0.308
				y of Green		0.400 - 0.700		0.633
				Gain of Blue		0.200 - 1.000		1.000
				x of Blue		0.100 - 0.300		0.142
				y of Blue		0.030 - 0.400		0.030
				Gain of White		0.200 - 1.000		1.000
				x of White		0.200 - 0.400		0.328
				y of White		0.200 - 0.400		0.380
			Reset to Default		Yes/No			
		Manual Adjustment	Enable		On/Off		Off	
			Auto Test Pattern		On/Off		On	
			Red Part of Red		0 - 1000		1000	
			Green Part of Red		0 - 1000		0	
	Blue Part of Red			0 - 1000		0		
	Green Part of Green			0 - 1000		1000		
Red Part of Green			0 - 1000		0			
Blue Part of Green			0 - 1000		0			
Blue Part of Blue		0 - 1000		1000				
Red Part of Blue		0 - 1000		0				
Green Part of Blue		0 - 1000		0				

Level 1	Level 2	Level 3(Or List)	Level 4(Or List)	Level 5(Or List)	Level 6(Or List)	Default		
Configuration	Color Matching	Manual Adjustment	Red Part of White	0 - 1000		1000		
			Green Part of White	0 - 1000		1000		
			Blue Part of White	0 - 1000		1000		
			Reset to Default	Yes/No				
	Hot-Key settings		Blank Screen					
			Aspect Ratio					
			Freeze Screen					
			Projector Info					
			Overscan					
	Service		Projector Info	Model Name				
				Serial Number				
				Native Resolution				
				Firmware				
				Configuration				
				Boot Code				
				Standby Mode				
				Lens Lock Settings				
				Wheel Index				
			FactoryReset...					
			Test pattern	Off				
				Grid				
				White				
				Black				
				Checkerboard				
				Color Bars				
				Red				
				Green				
				Blue				
				Yellow				
				Magenta				
			Cyan					
			Boresight					
			Phosphor Index					
Filter Index								
Error log			Show log					
			Clear log					
Mode Adjustment								
Laser Diode Info	LD1 Voltage							
	LD2 Voltage							
	LD3 Voltage							
	LD4 Voltage							
	LD5 Voltage							
	Bank1 temperature							
Bank2 temperature								
High ambient temperature warning	On/Off				On			



Level 1	Level 2	Level 3(Or List)	Level 4(Or List)	Level 5(Or List)	Level 6(Or List)	Default
Light Source	Light Source Mode	Constant Power/ Constant Intensity/Eco mode				Constant Power
	Constant Power	243 - 405				243, 259, 275, 292, 308, 324, 340, 356, 373, 389, 405
	Constant Intensity	0 - 10				7
	Total Projector Hours					
	Light Sensor	Light Sensor Calibration				
		Calibrated?	(display Yes/No)			
Status	Model Name					
	Serial Number					
	Native Resolution					
	Firmware					Vxx, Ayy, Bzz
	Main Input					
	Main Signal Format					
	Main Pixel Clock					
	Main Sync Type					
	Main Horz Refresh					
	Main Vert Refresh					
	PIP/PBP Input					
	PIP/PBP Signal Format					
	PIP/PBP Pixel Clock					
	PIP/PBP Sync Type					
	PIP/PBP Horz Refresh					
	PIP/PBP Vert Refresh					
	Light Source Power					
	Total Projector Hours					
	Standby Mode					
	Lens Lock Settings					
IP Address						
DHCP						
System Temperature						

Level 1	Level 2	Level 3(Or List)	Level 4(Or List)	Level 5(Or List)	Level 6(Or List)	Default	
Input Switching & PIP	Main Input	SPEC define					
	PIP/PBP Input	SPEC define					
	PIP/PBP Enable	OFF				OFF	
		ON					
	Swap						
	Size	(Small/Medium/Large)					
	Main Layout	(PBP, Main Left / PBP, Main Top / PBP, Main Right / PBP, Main Bottom / PIP-Bottom Right / PIP-Bottom Left / PIP-Top Left / PIP-Top Right)					
	Timing Detection Mode	Normal					Wide
		Wide					
	Source Info	Active Source					
		Signal Format					
		Aspect Ratio					
		Resolution					
		Vert Refresh					
		Horz Refresh					
		Pixel Clock					
		Sync Type					
		Color Space					
		PIP/PBP		(When PIP/PBP active)			
		<PIP/PBP source lines>		(When PIP/PBP active)			
	Enable source Hot-Key	ON					ON
		OFF					
	Source Hot-Key	VGA					Key number 1
		HDMI					Key number 2
		DVI-D					Key number 3
		Display Port					Key number 4
		Component					Key number 5
		S-Video					Key number 6
		Composite					Key number 7
		Christie Presenter					Key number 8
		Card Reader					Key number 9
		Mini USB					Key number 0
Input key	HDBaseT						
	Change Sources					Auto Source	
	List all Sources						
Auto Source							
Blank on Signal Switch	OFF					OFF	
	ON						
Language						English	
Test pattern	Off						
	Grid						
	White						
	Black						
	Checkerboard						
	Color Bars						

## 6.9 Preset Mode tables

Orion-Laser projector					
Description	Bright	Presentation	Video	Dicom	Real
PW	2X	2X	2X	2X	2X
CW	2X	2X	2X	2X	2X
Syt. mode number	0	6	6	6	6
color temperature	Warm	Bright	Warm	Warm	Warm
Bright	Please see below table for DWU/DHD & DWX				
Warm					
Warmest					
Cool					
Gamma	Video	Video	Video	Dicom	FILM
White peaking	100	100	100	100	100

Mode NO.	SQ	CT mode	OSD mode	CT
0	Bright	2X-Native	Bright	Warm
0	Bright	2X-D55	Bright	Warmest
0	Bright	2X-D70	Bright	Bright
0	Bright	2X-D80	Bright	Cool
1	Presentation	2X-Native	Presentation	Bright
1	Presentation	2X-D65	Presentation	Warm
1	Presentation	2X-D55	Presentation	Warmest
1	Presentation	2X-D85	Presentation	Cool
2	Video	2X-Native	Video	Warm
2	Video	2X-D55	Video	Warmest
2	Video	2X-D75	Video	Bright
2	Video	2X-D85	Video	Cool
3	Real	2X-Native	Real	Warm
3	Real	2X-D55	Real	Warmest
3	Real	2X-D75	Real	Bright
3	Real	2X-D85	Real	Cool

OSD	Gamma index
CRT	6
VIDEO	5
FILM	0
BRIGHT	4
DICOM	13

SIGNAL	Default Mode	IMAGE	Mode	Brightness	Contrast	Default Mode	IMAGE	Mode	Brightness	Contrast
Composite	Video Mode	PAL	Presentation Mode	50	50	Video Mode	NTSC	Presentation Mode	50	50
			Video Mode	50	50			Video Mode	50	50
			Bright Mode	50	50			Bright Mode	50	50
			Real Mode	50	50			Real Mode	50	50
			Dicom Mode	50	50			Dicom Mode	50	50
S-video	Video Mode	PAL	Presentation Mode	50	50	Video Mode	NTSC	Presentation Mode	50	50
			Video Mode	50	50			Video Mode	50	50
			Bright Mode	50	50			Bright Mode	50	50
			Real Mode	50	50			Real Mode	50	50
			Dicom Mode	50	50			Dicom Mode	50	50
VGA/PC	Presentation Mode	PC Signal	Presentation Mode	50	50	Video Mode	Component/ Video (720p,576p/1, 1080p/1...)	Presentation Mode	50	50
			Video Mode	50	50			Video Mode	50	50
			Bright Mode	50	50			Bright Mode	50	50
			Real Mode	50	50			Real Mode	50	50
			Dicom Mode	50	50			Dicom Mode	50	50
HDMI/DVI/ HDBaseT	Presentation Mode	PC Signal	Presentation Mode	50	50	Presentation Mode	HDMI/DVI (SD/HD)	Presentation Mode	50	50
			Video Mode	50	50			Video Mode	50	50
			Bright Mode	50	50			Bright Mode	50	50
			Real Mode	50	50			Real Mode	50	50
			Dicom Mode	50	50			Dicom Mode	50	50



#### Corporate offices

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