

# PGXC-61B / PGWX-61B / PGWU-61B



User manual

**BARCO**

Visibly yours

**Doc. Revision: 01**

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# 1. SAFETY

### About this chapter

Read this chapter attentively. It contains important information to prevent personal injury while installing and using your PRESENT series projector. Furthermore, it includes several cautions to prevent damage to your PRESENT series projector. Ensure that you understand and follow all safety guidelines, safety instructions and warnings mentioned in this chapter before installing and using the PRESENT series projector. After this chapter, additional “warnings” and “cautions” are given depending on the procedure. Read and follow these “warnings” and “cautions” as well.

### Clarification of the term “PRESENT series” used in this document

When referring in this document to the term “PRESENT series” means that the content is applicable for following Barco products:

- PGXG-61B
- PGWX-61B
- PGWU-61B

### Overview

- General considerations
- Important safety instructions

## 1.1 General considerations



**Caution:** Do not touch a lamp during operation and right after is turned off as it is extremely hot. Lamp contains mercury. It's brokeage might cause mercury or broken glass to follow out of lamp housing. To avoid exposure the risk of mercury poisoning. Don't drop, hit, force or scratch while handing a lamp.



**CAUTION:** Don't turn on the projector immediately after entering Standby mode.

### General safety instructions


- Before operating this equipment please read this manual thoroughly and retain it for future reference.
- Installation and preliminary adjustments should be performed by qualified Barco personnel or by authorized Barco service dealers.
- All warnings on the projector and in the documentation manuals should be adhered to.
- All instructions for operating and use of this equipment must be followed precisely.
- All local installation codes should be adhered to.

**CAUTION!**

HIGH TEMPERATURE COOL FOR 30 MINUTES. HIGH PRESSURE LAMP MAY EXPLODE IF IMPROPERLY HANDED. REFER TO LAMP REPLACEMENT INSTRUCTIONS. DISCONNECT POWER BEFORE CHANGING LAMP.

ATTENTION:  
A HAUTES TEMPERATURES  
REFROIDISSEZ PENDANT 30 MINUTES.  
Les lampes à haute pression peuvent  
exploser si elles sont mal utilisées.  
Confier l'entretien à une personne qualifiée.  
COUPER LE COURANT AVANT  
DEREMPLACER LE LAMPES.



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.



The hot surface symbol within an equilateral triangle is intended to alert the user the presence of “hot surface” on lamp module, so when the user replace the lamp, please allow the unit to cool down.



The lamp in the projector contains mercury, which must be recycled or disposed of in accordance with local, state, or country laws.



Do not look into the projector's lens when the lamp is on. The bright light may hurt and damage your eyes.

### Notice on safety

This equipment is built in accordance with the requirements of the international safety standards IEC60950-1, EN60950-1, UL60950-1 and CAN/CSA C22.2 No.60950-1, which are the safety standards of information technology equipment including electrical business equipment. These safety standards impose important requirements on the use of safety critical components, materials and insulation, in order to protect the user or operator against risk of electric shock and energy hazard and having access to live parts. Safety standards also impose limits to the internal and external temperature rises, radiation levels, mechanical stability and strength, enclosure construction and protection against the risk of fire. Simulated single fault condition testing ensures the safety of the equipment to the user even when the equipment's normal operation fails.

### Users definition

Throughout this manual, the term SERVICE PERSONNEL refers to persons having appropriate technical training and experience necessary to be knowledgeable of potential hazards to which they are exposed (including, but not limited to HIGH VOLTAGE ELECTRIC and ELECTRONIC CIRCUITRY and HIGH BRIGHTNESS PROJECTORS) in performing a task, and of measures to minimize the potential risk to themselves or other persons. The term USER and OPERATOR refers to any person other than SERVICE PERSONNEL, AUTHORIZED to operate professional projection systems.

A PRESENT series projector is intended "FOR PROFESSIONAL USE ONLY" by AUTHORIZED PERSONNEL familiar with potential hazards associated with high voltage, high intensity light beams, ultraviolet exposure and high temperatures generated by the lamp and associated circuits. Only qualified SERVICE PERSONNEL, knowledgeable of such risks, are allowed to perform service functions inside the product enclosure.

### Owners record

The part number and serial number are printed on a label which is stuck on the respective part. Record these numbers in the spaces provided below. Refer to them whenever you call upon your Barco dealer regarding this product.

Product article number	
Product serial number	
Dealer	

## 1.2 Important safety instructions

### To prevent the risk of electrical shock

- This product should be operated from a mono phase AC power source.
- This apparatus must be grounded (earthed) via the supplied 3 conductor AC power cable. If none of the supplied power cables are the correct one, consult your dealer. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the purpose of the grounding-type plug.
- Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord. To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- Use only the power cord supplied with your device. While appearing to be similar, other power cords have not been safety tested at the factory and may not be used to power the device. For a replacement power cord, contact your dealer.
- Do not operate the projector with a damaged cord. Replace the cord. Do not operate the projector if the projector has been dropped or damaged until it has been examined and approved for operation by a qualified service technician.
- Position the cord so that it will not be tripped over, pulled, or contact hot surfaces.
- If an extension cord is necessary, a cord with a current rating at least equal to that of the projector should be used. A cord rated for less amperage than the projector may overheat.
- Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electrical shock.
- Do not expose this projector to rain or moisture.

## 1. Safety

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- Do not immerse or expose this projector in water or other liquids.
- Do not spill liquid of any kind on this projector.
- Should any liquid or solid object fall into the cabinet, unplug the set and have it checked by qualified service personnel before resuming operations.
- Do not disassemble this projector, always take it to an authorized trained service person when service or repair work is required.
- Do not use an accessory attachment which is not recommended by the manufacturer.
- Lightning - For added protection for this video product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the device due to lightning and AC power-line surges.

### To prevent personal injury

- Isolate electrically before replacing the lamp or lamp house. Caution: Hot lamp (house).
- Caution: High pressure lamp may explode if improperly handled. Refer servicing to qualified service personnel.
- To prevent injury and physical damage, always read this manual and all labels on the system before inserting the lamp casing, connecting to the wall outlet or adjusting the projector.
- To prevent injury, take note of the weight of the projector.
- To prevent injury, ensure that the lens and all covers are correctly installed. See installation procedures.
- Warning: high intensity light beam. NEVER look into the lens ! High luminance could result in damage to the eye.
- Warning: extremely high brightness lamps: This projector uses extremely high brightness lamps. Never attempt to look directly into the lens or at the lamp. If the projection distance is less than 6 meter, any person needs to be at least 4 meters away from the projected image. Avoid close range reflection of the projected image on any reflecting surface (such as glass, metal, ...) . When operating the projector, we strongly recommend wearing suitable safety glasses.
- Before attempting to remove any of the projector's covers, you must turn off the projector and disconnect from the wall outlet.
- When required to switch off the projector, to access parts inside, always disconnect the power cord from the power net.
- The power input at the projector side is considered as the disconnect device. When required to switch off the projector, to access parts inside, always disconnect the power cord at the projector side. In case the power input at the projector side is not accessible (e.g. ceiling mount), the socket outlet supplying the projector shall be installed nearby the projector and be easily accessible, or a readily accessible general disconnect device shall be incorporated in the fixed wiring.
- Do not place this equipment on an unstable cart, stand, or table. The product may fall, causing serious damage to it and possible injury to the user.
- It is hazardous to operate without lens or shield. Lenses, shields or ultra violet screens shall be changed if they have become visibly damaged to such an extent that their effectiveness is impaired. For example by cracks or deep scratches.
- Warning: Protection from ultraviolet radiation: Do not look directly in the light beam. The lamp contained in this product is an intense source of light and heat. One component of the light emitted from this lamp is ultraviolet light. Potential eye and skin hazards are present when the lamp is energized due to ultraviolet radiation. Avoid unnecessary exposure. Protect yourself and your employees by making them aware of the hazards and how to protect themselves. Protecting the skin can be accomplished by wearing tightly woven garments and gloves. Protecting the eyes from UV can be accomplished by wearing safety glasses that are designed to provide UV protection. In addition to the UV, the visible light from the lamp is intense and should also be considered when choosing protective eye wear.
- Exposure to UV radiation: Some medications are known to make individuals extra sensitive to UV radiation. The American Conference of Governmental Industrial Hygienists (ACGIH) recommends occupational UV exposure for an 8 hour day to be less than 0,1 micro-watts per square centimeters of effective UV radiation. An evaluation of the workplace is advised to assure employees are not exposed to cumulative radiation levels exceeding these government guidelines. The exposure of this UV radiation is allowed for only 1 hour per day for maintenance and service persons.
- Mercury Vapor Warnings: Keep the following warnings in mind when using the projector. The lamp used in the projector contains mercury. In case of a lamp rupture, explosion there will be a mercury vapor emission. In order to minimize the potential risk of inhaling mercury vapors: - Ensure the projector is installed only in ventilated rooms. - Replace the lamp module before the end of its operational life. - Promptly ventilate the room after a lamp rupture, explosion has occurred, evacuate the room (particularly in case of a pregnant woman). - Seek

medical attention if unusual health conditions occur after a lamp rupture, explosion, such as headache, fatigue, shortness of breath, chest-tightening coughing or nausea.

### To prevent fire hazard

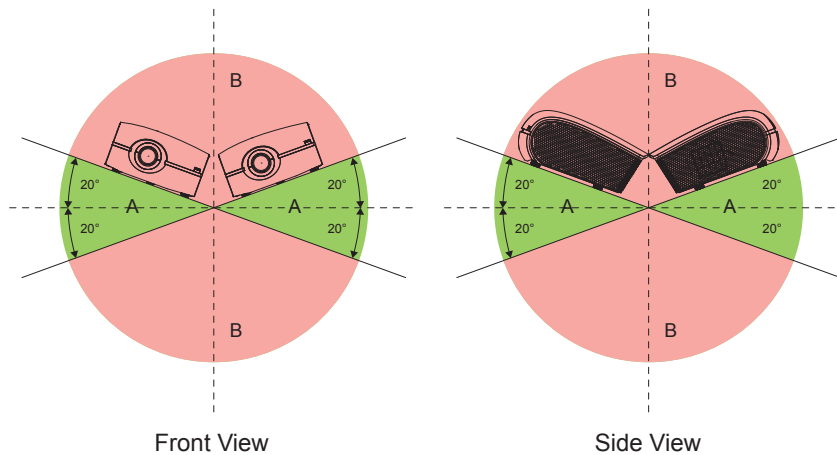
- Do not place flammable or combustible materials near the projector!
- Barco large screen projection products are designed and manufactured to meet the most stringent safety regulations. This projector radiates heat on its external surfaces and from ventilation ducts during normal operation, which is both normal and safe. Exposing flammable or combustible materials into close proximity of this projector could result in the spontaneous ignition of that material, resulting in a fire. For this reason, it is absolutely necessary to leave an "exclusion zone" around all external surfaces of the projector whereby no flammable or combustible materials are present. The exclusion zone must be not less than 50 cm (20") for all DLP projectors. The exclusion zone on the lens side must be at least 5 m. Do not cover the projector or the lens with any material while the projector is in operation. Keep flammable and combustible materials away from the projector at all times. Mount the projector in a well-ventilated area away from sources of ignition and out of direct sun light. Never expose the projector to rain or moisture. In the event of fire, use sand, CO<sub>2</sub> or dry powder fire extinguishers. Never use water on an electrical fire. Always have service performed on this projector by authorized Barco service personnel. Always insist on genuine Barco replacement parts. Never use non-Barco replacement parts as they may degrade the safety of this projector.
- Slots and openings in this equipment are provided for ventilation. To ensure reliable operation of the projector and to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the projector too close to walls, or other similar surface. This projector should never be placed near or over a radiator or heat register. This projector should not be placed in a built-in installation or enclosure unless proper ventilation is provided.
- Projection rooms must be well ventilated or cooled in order to avoid build up of heat.
- Let the projector cool down completely before storing. Remove cord from the projector when storing.
- Heat sensitive materials should not be placed in the path of the exhausted air or on the lamp house.

### To prevent projector damage

- This projector has been designed for use with a specific lamp (house) type. See installation instructions for its correct type.
- The air filters of the projector must be cleaned or replaced on regular base (a "clean" booth would be monthly-minimum). Neglecting this could result in disrupting the air flow inside the projector, causing overheating. Overheating may lead to the projector shutting down during operation.
- The projector must always be installed in a manner which ensures free flow of air into its air inlets and unimpeded evacuation of the hot air from its cooling system.
- In order to ensure that correct airflow is maintained, and that the projector complies with Electromagnetic Compatibility (EMC) requirements, it should always be operated with all of its covers in place.
- Slots and openings in the cabinet are provided for ventilation. To ensure reliable operation of the product and to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register. The device should not be placed in a built-in installation or enclosure unless proper ventilation is provided.
- Ensure that nothing can be spilled on, or dropped inside the projector. If this does happen, switch off and unplug the mains supply immediately. Do not operate the projector again until it has been checked by qualified service personnel.
- Do not block the projector cooling fans or free air movement around the projector. Loose papers or other objects may not be nearer to the projector than 30 cm (12") on any side.
- Do not use this equipment near water.
- Special care for Laser Beams: Special care should be used when DLP projectors are used in the same room as high power laser equipment. Direct or indirect hitting of a laser beam on to the lens can severely damage the Digital Mirror Devices™ in which case there is a loss of warranty.
- Never place the projector in direct sun light. Sun light on the lens can severely damage the Digital Mirror Devices™ in which case there is a loss of warranty.
- Save the original shipping carton and packing material. They will come in handy if you ever have to ship your equipment. For maximum protection, repack your set as it was originally packed at the factory.
- Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning. Never use strong solvents, such as thinner or benzine, or abrasive cleaners, since these will damage the cabinet. Stubborn stains may be removed with a cloth lightly dampened with mild detergent solution.

## 1. Safety

- To ensure the highest optical performance and resolution, the projection lenses are specially treated with an anti-reflective coating, therefore, avoid touching the lens. To remove dust on the lens, use a soft dry cloth. Do not use a damp cloth, detergent solution, or thinner.
- Rated maximum ambient temperature,  $t_a = 40\text{ }^{\circ}\text{C}$  (104  $^{\circ}\text{F}$ ).
- The lamp house shall be replaced if it has become damaged or thermally deformed.
- Horizontal and vertical projector tilt ranges: The projector is designed to work in a table or ceiling mounted position, but tilting is allowed. Side to side tilt, however, must not exceed  $\pm 20^{\circ}$ . This limit ensures that the lamp in the projector operates properly and safely.
  - A: Tilting allowed without problems
  - B: No tilting allowed in this area



### On servicing

- Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage potentials and risk of electric shock.
- Refer all servicing to qualified service personnel.
- Attempts to alter the factory-set internal controls or to change other control settings not specially discussed in this manual can lead to permanent damage to the projector and cancellation of the warranty.
- Unplug this product from the wall outlet and refer servicing to qualified service technicians under the following conditions:
  - When the power cord or plug is damaged or frayed.
  - If liquid has been spilled into the equipment.
  - If the product has been exposed to rain or water.
  - If the product does not operate normally when the operating instructions are followed. Adjust only those controls that are covered by the operating instructions since improper adjustment of the other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.
  - If the product has been dropped or the cabinet has been damaged.
  - If the product exhibits a distinct change in performance, indicating a need for service.
- Replacement parts: When replacement parts are required, be sure the service technician has used original Barco replacement parts or authorized replacement parts which have the same characteristics as the Barco original part. Unauthorized substitutions may result in degraded performance and reliability, fire, electric shock or other hazards. Unauthorized substitutions may void warranty.
- Safety check: Upon completion of any service or repairs to this projector, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
- Possible explosion hazard: Always keep in mind the caution below:



**Caution: Do not touch a lamp during operation and right after is turned off as it is extremely hot. Lamp contains mercury. It's brokeage might cause mercury or broken glass to follow out of lamp housing. To avoid exposure the risk of mercury poisoning. Don't drop, hit, force or scratch while handing a lamp.**

### **To prevent battery explosion**

- Danger of explosion if battery is incorrectly installed.
- Replace only with the same or equivalent type recommended by the manufacturer. (AAA LR03, 1.5V)
- For disposal of used batteries, always consult federal, state, local and provincial hazardous waste disposal rules and regulations to ensure proper disposal.



## 2. INTRODUCTION

### About this chapter

Read this chapter before installing PRESENT series projector. It contains important information concerning installation requirements for the PRESENT series projector, such as minimum and maximum allowed ambient temperature, humidity conditions, required safety area around the installed projector, required power net, etc.

Furthermore, careful consideration of things such as image size, ambient light level, projector placement and type of screen to use are critical to the optimum use of the projection system.

### Overview

- Installation requirements
- Projector package overview



**Note:** Barco provides a guarantee relating to perfect manufacturing as part of the legally stipulated terms of guarantee. Observing the specification mentioned in this chapter is critical for projector performance. Neglecting this can result in loss of warranty.

## 2.1 Installation requirements

### Environment conditions

Table below summarizes the physical environment in which the PGXG-61B/PGWX-61B/PGWU-61B projector may be safely operated or stored.

Environment	Operating	Non-Operating
Ambient Temperature	5 °C (41 °F) to 40 °C (104 °F)	-10°C (14°F) to 60°C (140°F)
Humidity	10% to 85% RH Non-Condensed	5% to 90% RH Non-Condensed
Altitude	0 (0Ft) to 3000m (9843Ft)	

### Cooling requirements

The projector is fan cooled and must be installed with sufficient space around the projector head, minimum 30 cm (12 inch) to ensure sufficient air flow. It should be used in an area where the ambient temperature, as measured at the projector air inlet, does not exceed +40°C (+104°F).

### Clean air environment

A projector must always be mounted in a manner which ensures the free flow of clean air into the projectors ventilation inlets. For installations in environments where the projector is subject to airborne contaminants such as that produced by smoke machines or similar (these deposit a thin layer of greasy residue upon the projectors internal optics and imaging electronic surfaces, degrading performance), then it is highly advisable and desirable to have this contamination removed prior to it reaching the projectors clean air supply. Devices or structures to extract or shield contaminated air well away from the projector are a prerequisite, if this is not a feasible solution then measures to relocate the projector to a clean air environment should be considered.

Only ever use the manufacturer's recommended cleaning kit which has been specifically designed for cleaning optical parts, never use industrial strength cleaners on the projector's optics as these will degrade optical coatings and damage sensitive optoelectronics components. Failure to take suitable precautions to protect the projector from the effects of persistent and prolonged air contaminants will culminate in extensive and irreversible ingrained optical damage. At this stage cleaning of the internal optical units will be noneffective and impracticable. Damage of this nature is under no circumstances covered under the manufacturer's warranty and may deem the warranty null and void. In such a case the client shall be held solely responsible for all costs incurred during any repair. It is the clients responsibility to ensure at all times that the projector is protected from the harmful effects of hostile airborne particles in the environment of the projector. The manufacturer reserves the right to refuse repair if a projector has been subject to knowingly neglect, abandon or improper use.

### Main Power requirements

The PRESENT series projector operates from a nominal mono phase power net with a separate earth ground PE.



Projector	Power requirements
PGXG-61B	AC INPUT 100-240V, 6.5A, 50/60Hz
PGWX-61B	AC INPUT 100-240V, 6.5A, 50/60Hz
PGWU-61B	AC INPUT 100-240V, 6.5A, 50/60Hz

The power cord required to connect the projector with the power net is delivered with the projector.

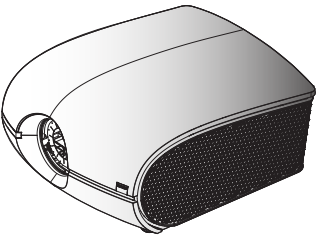

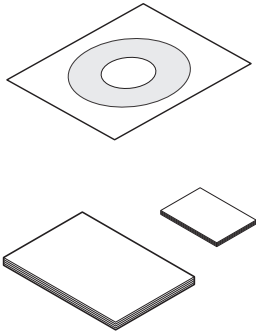
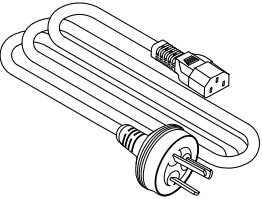
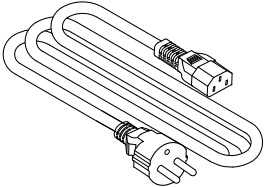
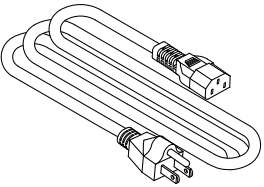
### Projector weight

Do not underestimate the weight of the projector. The projector weights about  $17\pm0.5$  kg without lens. Be sure that the pedestal or ceiling mount on which the projector has to be installed is capable of handling five (5) times the complete load of the system.

## 2.2 Projector package overview

### Box content

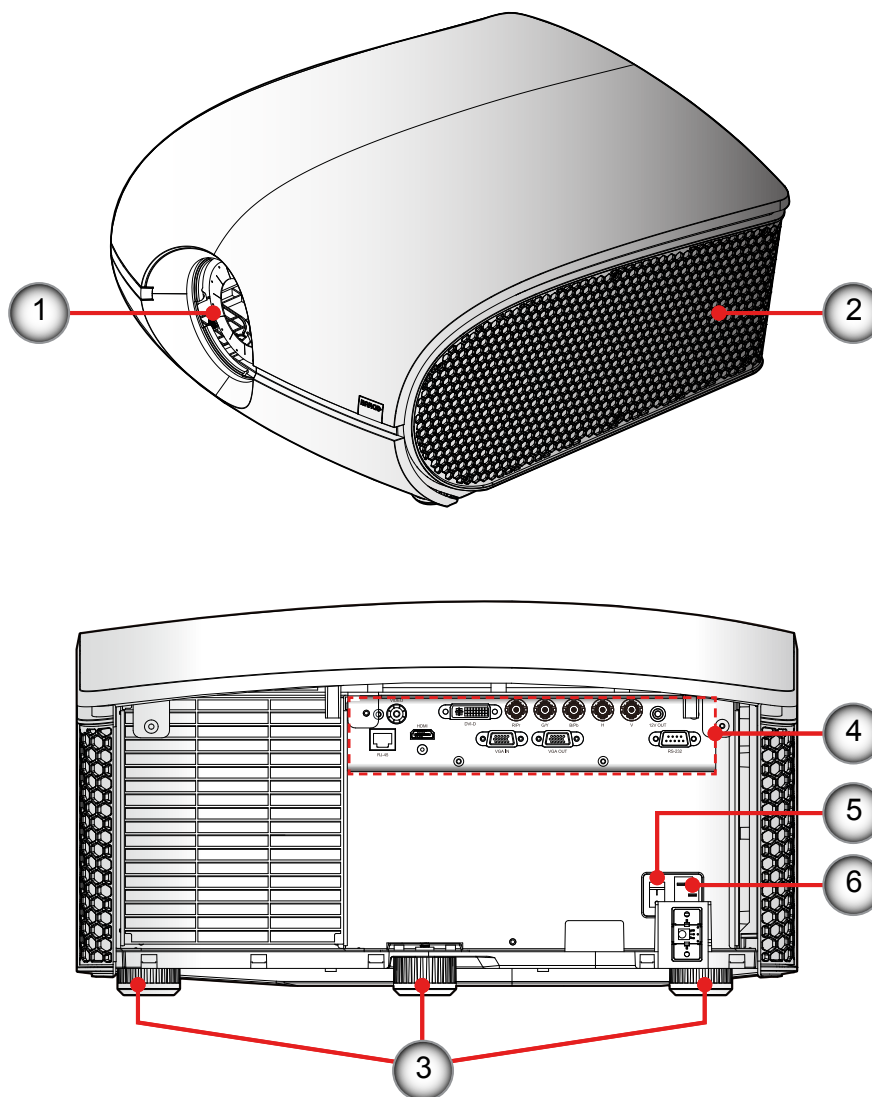
This projector comes with all the items shown below. Check to make sure your package is complete. Contact your dealer immediately if anything is missing.

		
Projector	Remote Control with two AAA size batteries	User Guide, Quick Start Guide, Safety Manual
		
Power Cord (China)	Power Cord (EU)	Power Cord (US)

### 2.3 Product Overview

#### 2.3.1 Main Unit

##### Component Location



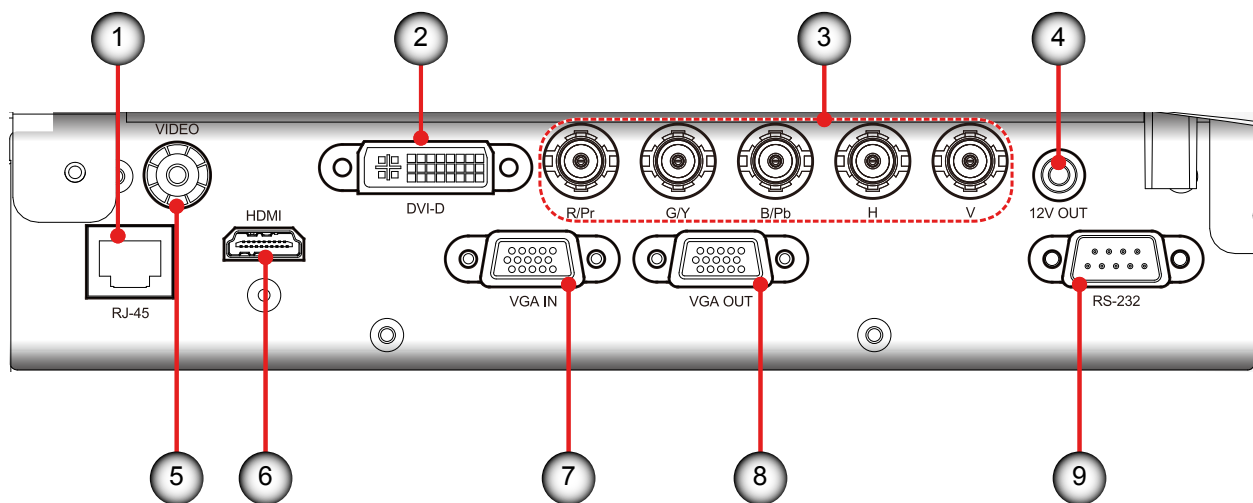
- ① Projection Lens
- ② Lamp Cover
- ③ Tilt-Adjustment Feet
- ④ Input/Output (I/O) Panel
- ⑤ Power Switch
- ⑥ Power Socket (AC Input: AC100-240V~, 50-60Hz)



**Note:** The Projection Lens is optional item not a standard accessory in the package.

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

#### Component Location

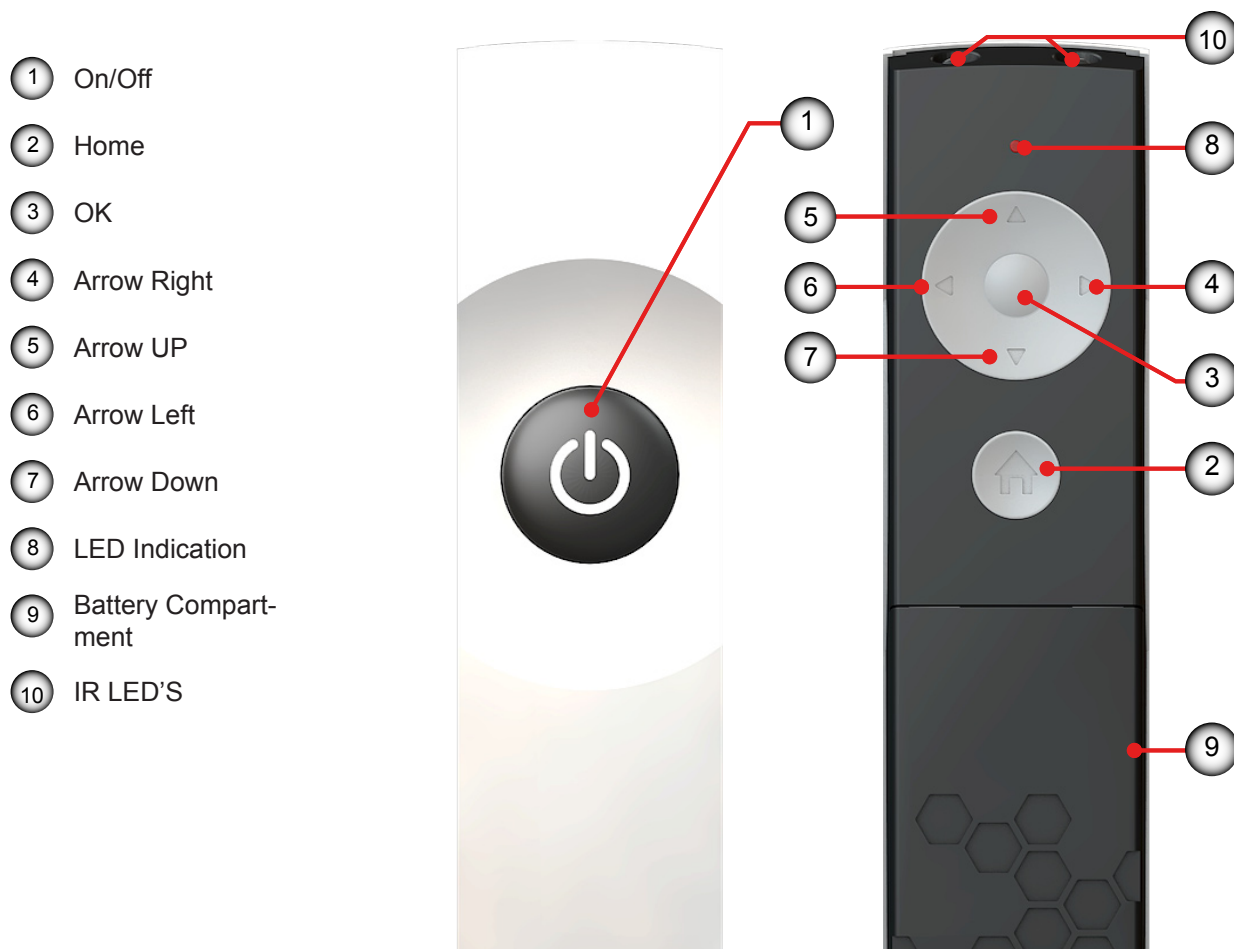


- ① Networking Connector RJ45
- ② DVI-D Input ConnectorVideo Input Connector
- ③ BNC Input Connector (YPbPr/RGBHV)
- ④ +12V Relay Connector
- ⑤ Video Input Connector
- ⑥ HDMI Connector
- ⑦ VGA Connector (PC Analog Signal/Component Video Input)
- ⑧ Monitor Connector (Loop from VGA)
- ⑨ RS232 Connector

## 2. Introduction

### 2.3.3 Remote Control

#### Button Location



Use the remote control to control these functions.

Basic Remote Command (Result)	Remote Lite (Action)	
Start the projector	Press "On/off"	1
Turn off the projector	Press "On/off"	1 > 1
Show main menu on screen	Press "Home"	2
Move through menu	Press "Arrow keys"	5 6 4 7
Select button	Press "OK"	3
Select and return to previous menu	Press "OK"	3
Return to previous menu without selecting	Press "Home"	2
Clear OSD Lite of screen	Press "Home"	2
Activate electronic dowser	press 2x "Arrow keys"	Press any key to deactivate the electronic dowser.

## 3. INSTALLATION

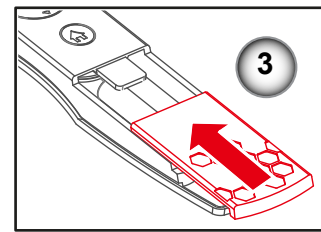
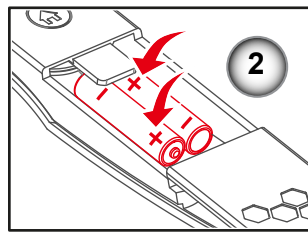
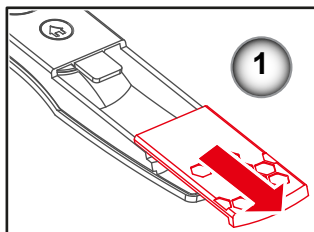
### Overview

- RCU Battery Installation
- Installing the Lens
- Connecting the Projector
- Powering On/Off the Projector
- Adjusting the Projected Image
- Ceiling Mount Installation

### 3.1 RCU Battery Installation

#### Procedure:

1. Remove the cover by sliding it in the direction indicated by the arrow. ①
2. Insert two new AAA batteries (observe the polarity). ②
3. Replace the cover. ③



#### Notes for the Remote Control Unit

- Be sure to insert the batteries in the corresponding orientations to match the polarities.
- Do not mix new batteries with used batteries as it would shorten the life of new batteries or cause leakage.
- Only used AAA batteries as instructed; do not attempt to insert different types of batteries into the remote control.
- If the remote is going to be unused for long periods of time, be sure to remove the batteries to prevent leakage, which could damage the remote control.
- The liquid contents in the batteries is harmful to the skin; do not touch the leakage with your bare hands directly. When installing fresh batteries, be sure to clean up the leakage thoroughly.
- Under most circumstances, you only need to point the remote control towards the screen and the IR signal would be reflected off the screen and picked up by the IR sensor on the projector. But under specific circumstances, the projector may fail to receive signals from the remote control due to environmental factors. When this happens, orient the remote control at the projector and try again.
- If the range of effective remote control signal reception decreases or if the remote control stops working, replace the batteries.
- If the infrared receiver is exposed to fluorescent lamp or strong sunlight, the remote control may not operate normally.
- Refer to the regulations enforced by your local government on the disposal of used batteries; improper disposal could damage the environment.

### 3. Installation

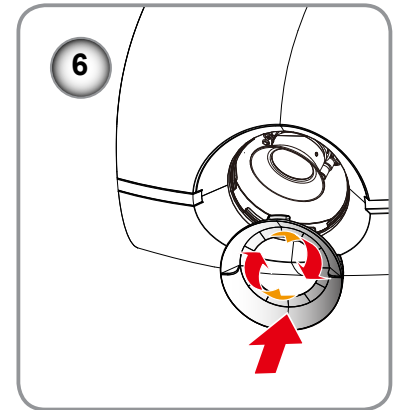
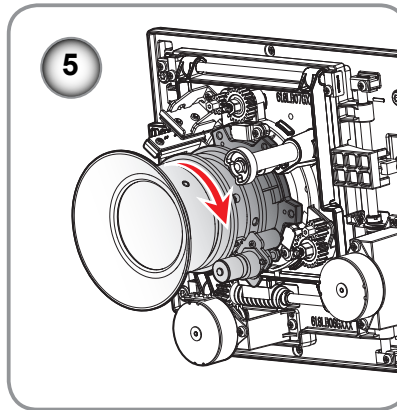
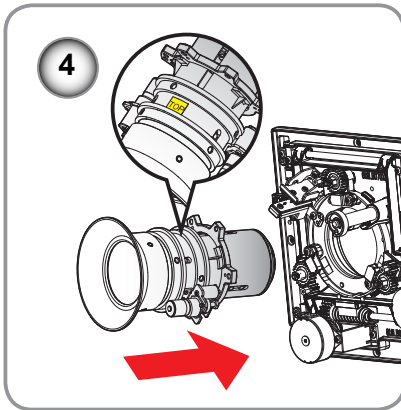
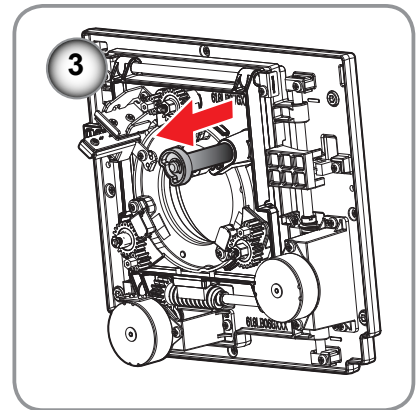
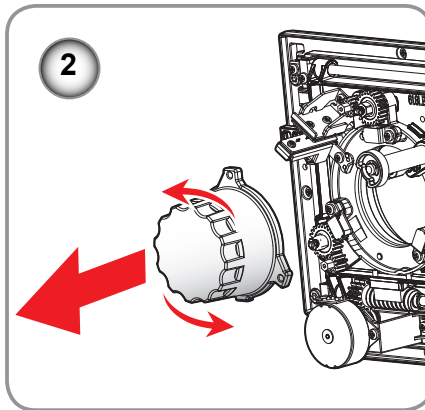
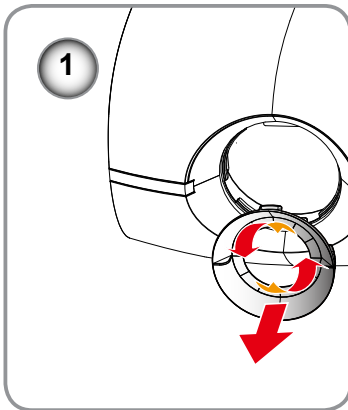
#### 3.2 Installing the Lens



**Warning:** This procedure may only be performed by qualified technical service personnel.

**Procedure:**

1. Turn the projector off and unplug the power cord.
2. Allow the projector to cool down for at least 1 minute then start the lens replacement.
3. Remove the lens ring cover. ①
4. Remove the lens cap counterclockwise. ②
5. Pull the bar to release the lock. ③
6. Be sure the label of lens is upward and then push the lens into the position. ④
7. Rotate the lens clockwise to lock the lens while pull the bar ③ to release the lock. ⑤
8. Put the lens ring cover back to its place. Push rubber fingers over lens edge. ⑥
9. To replace the lens module, reverse the previous steps.
10. Lens cap should be removed before installing. If not it will damage the projector.



**Caution:** Do not transport the projector with any lens installed.

**Lens Specification**

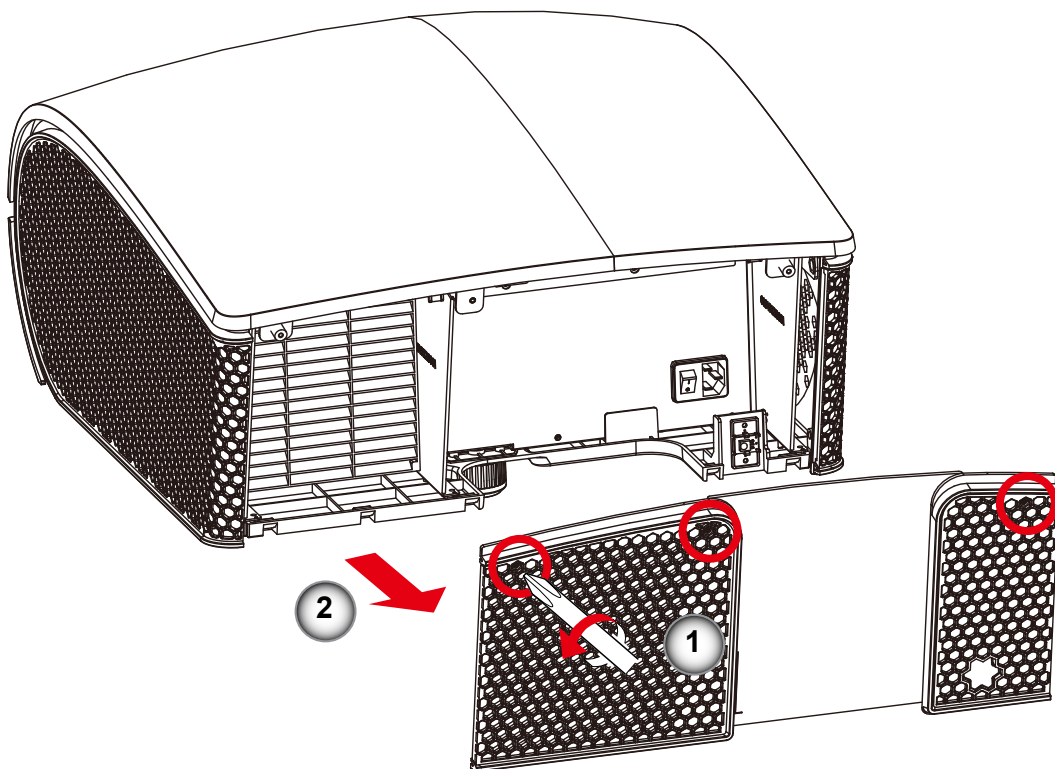
Projection Lens P/N	R9832755	R9832753	R9832754	R9832756
Lens Type	Wide Zoom	Standard XGA/WXGA	Standard WUXGA	Long Zoom
Throw Ratio (XGA)	0.99-1.26	1.26-1.58	---	1.58-3.00
Throw Ratio (WXGA)	1.00-1.28	1.28-1.61	---	1.60-3.07
Throw Ratio (WUXGA)	0.95-1.22	---	1.22-1.53	1.52-2.92
Zoom Ratio	1.28X	1.25X	1.25X	1.9X

### 3.3 Connecting the Projector

#### 3.3.1 Removing the rear cover

**Procedure**

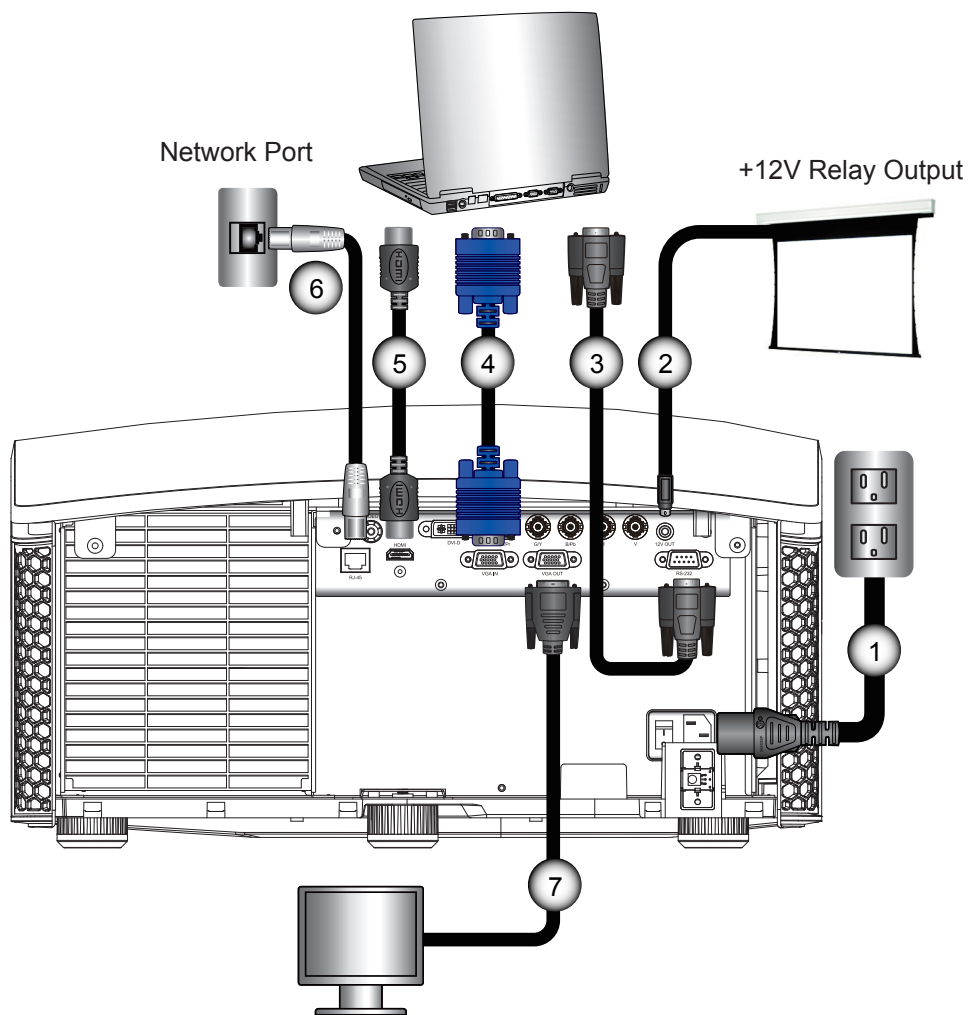
1. Unscrew the three screws on the cover. ①
2. Lift up and remove the cover. ②
3. To install the rear cover, reverse the previous steps.



### 3. Installation

#### 3.3.2 Connecting to a Computer or Laptop

##### Wiring Diagram



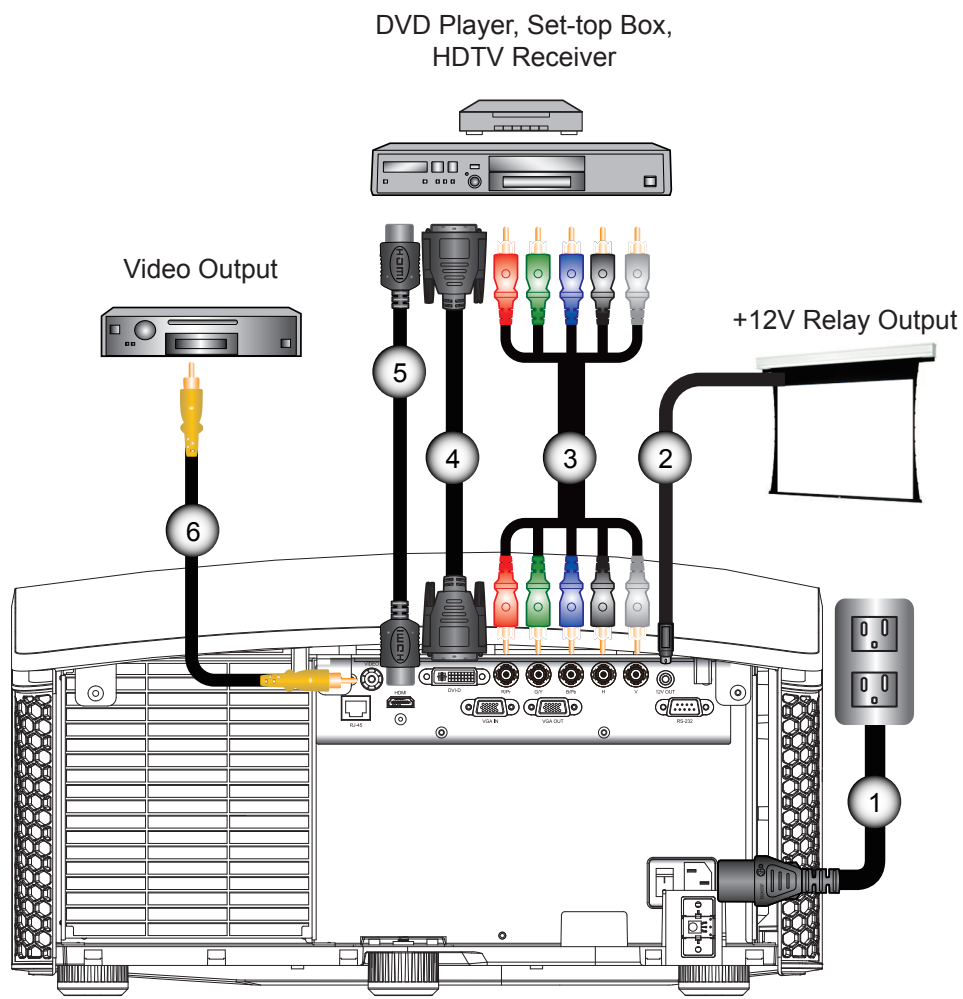
- ① Power Cord
- ② 12V DC Jack
- ③ RS232 Cable
- ④ VGA in Cable

- ⑤ HDMI Cable
- ⑥ Network Cable
- ⑦ VGA out Cable



## 3.3.3 Connecting to Video Sources

## Wiring Diagram

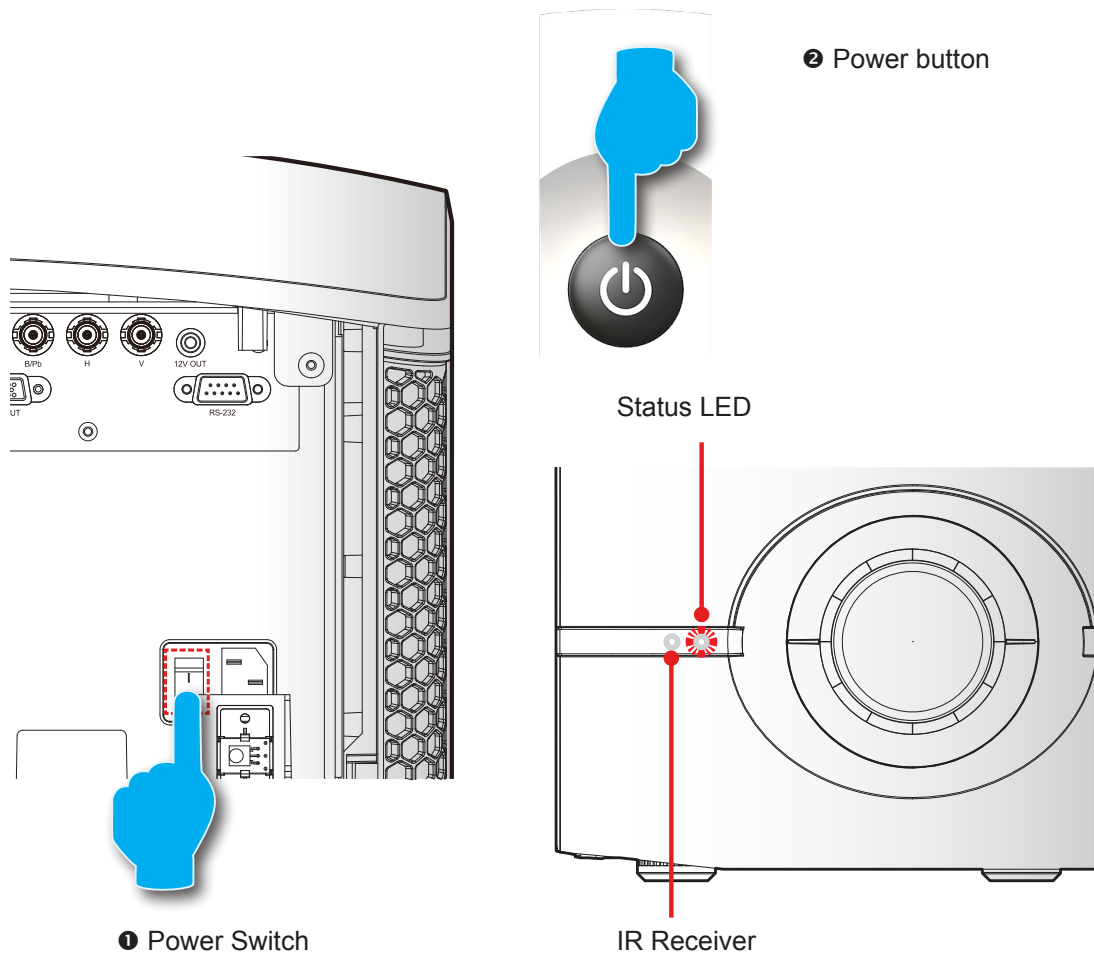


## 3.4 Powering On/Off the Projector

### 3.4.1 Powering On the Projector

**Procedure:**

1. Ensure that the power cord and signal cable are securely connected. Power on the switch ❶ and the Status LED is solid red.
2. Turn on the lamp by pressing “⏻” on the remote control. The Status LED is off. ❷  
The startup screen displays in approximately 10 seconds.
3. Turn on your source. Select an input source by the remote control (HDMI, VGA, BNC, DVI or Video).  
The projector detects the source you selected and displays the image.



### 3.4.2 Powering Off the Projector

**Procedure:**

1. Press “⏻” key of the remote, a message displays on the projector’s screen.
2. Press “⏻” key again to confirm, otherwise the message disappears after 5 seconds.



**CAUTION:** Don't turn on the projector immediately after entering Standby mode.

## 3.5 Adjusting the Projected Image

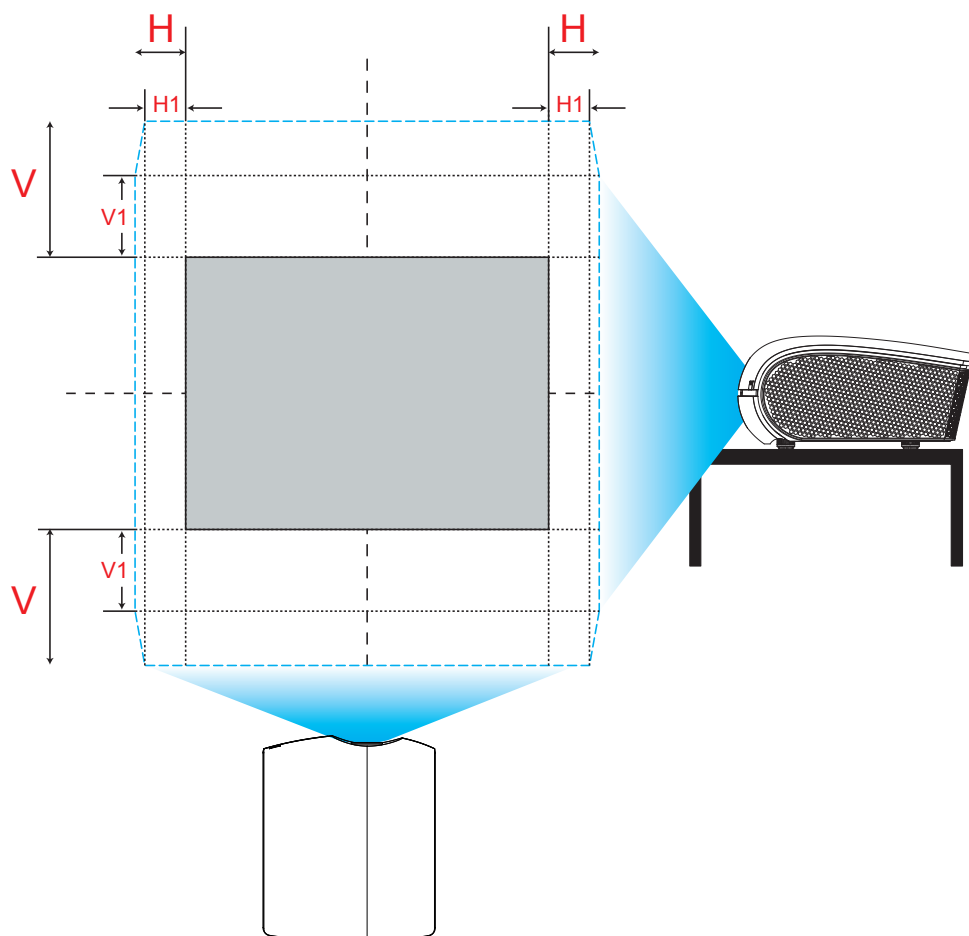
### Adjusting the Projector's Position

To determine where to position 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. Here are some general guidelines:

- Position the projector on a flat surface at a right angle to the 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.
- The image offset (shift) range for the projector please refer below:

Model	H	V	H1	V1
PGXG-61B	28%	100%	0%	40%
PGWX-61B	28%	100%	20%	60%
PGWU-61B	28%	100%	20%	40%

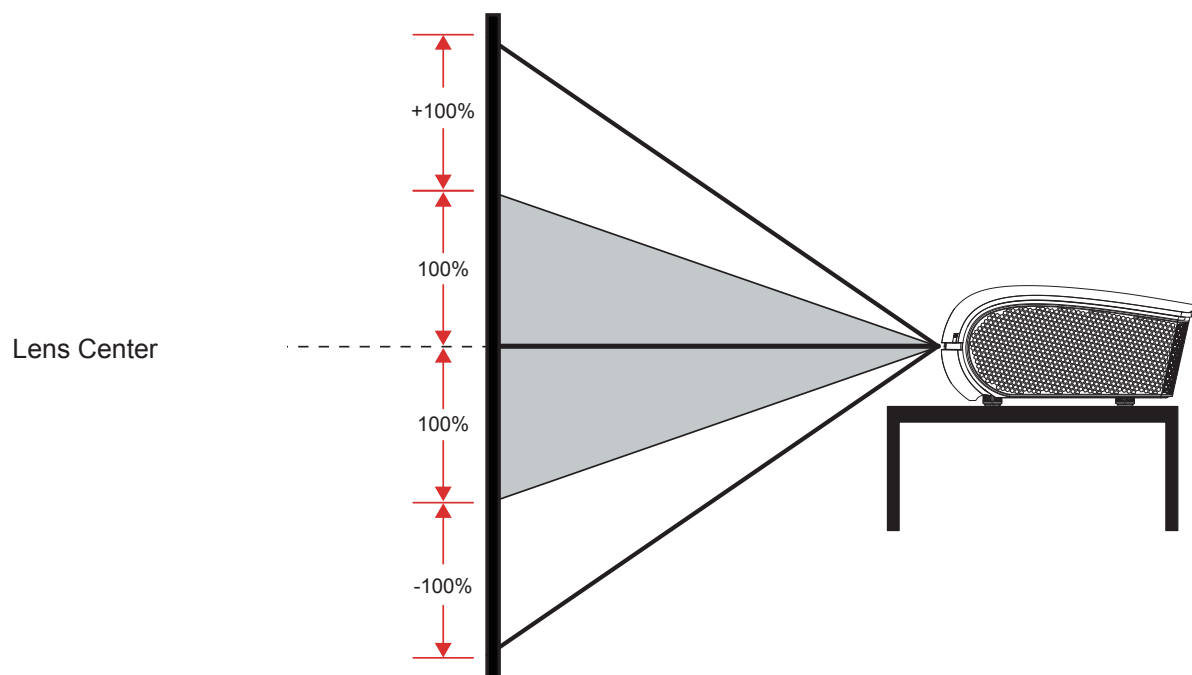
H: the horizontal image offset range when lens is centered.  
V: the vertical image offset range when lens is centered.  
H1: the horizontal image offset range when lens is at +/-100% vertical offset.  
V1: the vertical image offset range when lens is when lens is at +/-28% horizontal offset.



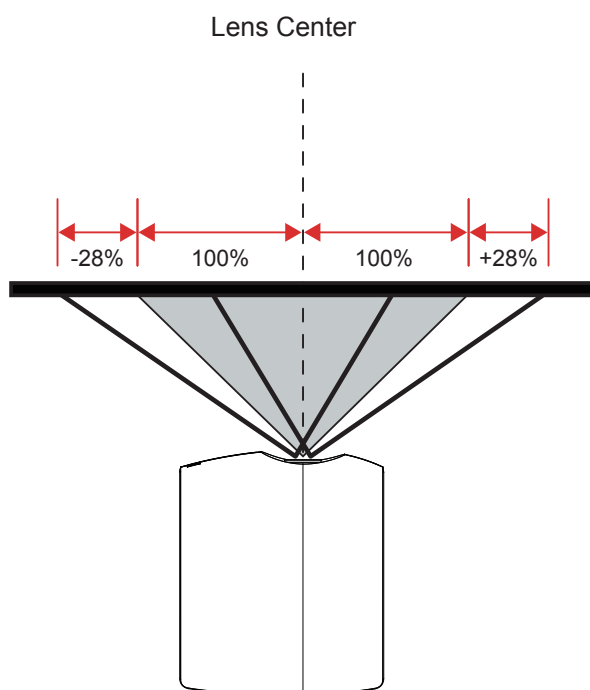
### 3. Installation

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**Vertical Image Offset: +/-100%**



**Horizontal Image Offset: +/-28%**

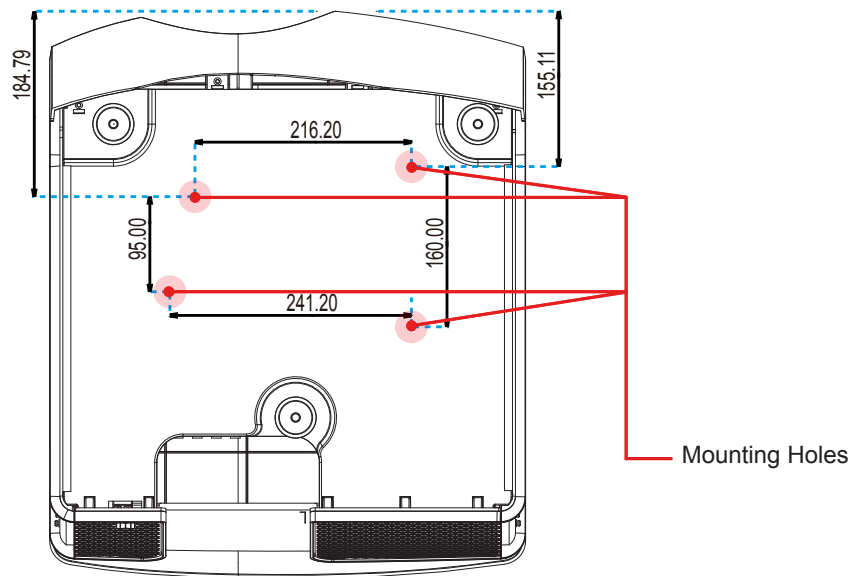


## 3.6 Ceiling Mount Installation

**Requirements:**

Ensure the screws used to attach a mount to the projector meet the following specifications:

- Screw type: M6\*10
- Mounting dimension



**Note:** Damage resulting from incorrect installation will void the warranty.

## 4. USER CONTROLS

### Overview

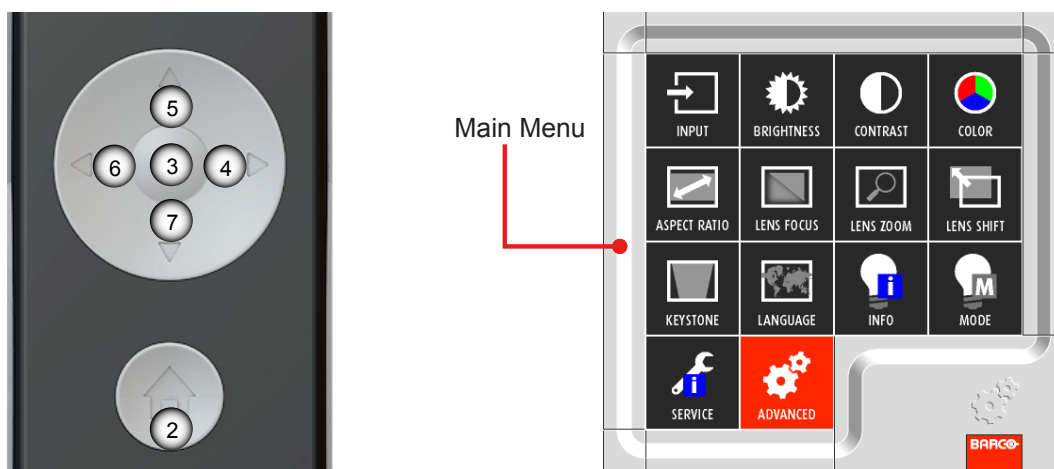
- On-Screen Display Menus

### 4.1 On-Screen Display Menus

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

#### 4.1.1 Using the OSD Lite Menu

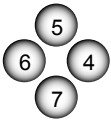

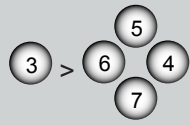





















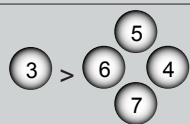


















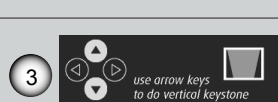




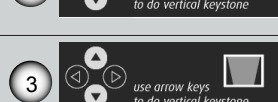




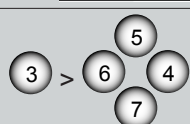





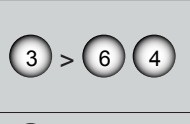







##### Main Menu & Buttons



##### Functionality

Basic OSD Lite navigation (Result)	Remote Lite (Action)		OSD Lite (On Screen)
Show main menu of OSD Lite on screen	Press "Home"	2	main menu appears in bottom right corner
To move through the OSD Lite	Press "Arrow keys"	5 6 4 7	button will turn red when the function is available
Go to desired function	Press "OK"	3	the menu of the desired function will appear
Leave the menu or clear the screen	Press "Home"	2	the main menu will be displayed or when you are in the main menu the screen will be cleared

Hotkey / Short Cut Remote Command (Result)	Remote Lite -> OSD Lite (Action -> On Screen)	
To quick adjust a blurry screen		
To mute picture on the projector	5 > 5	
Unmute picture on the projector	Press any key	

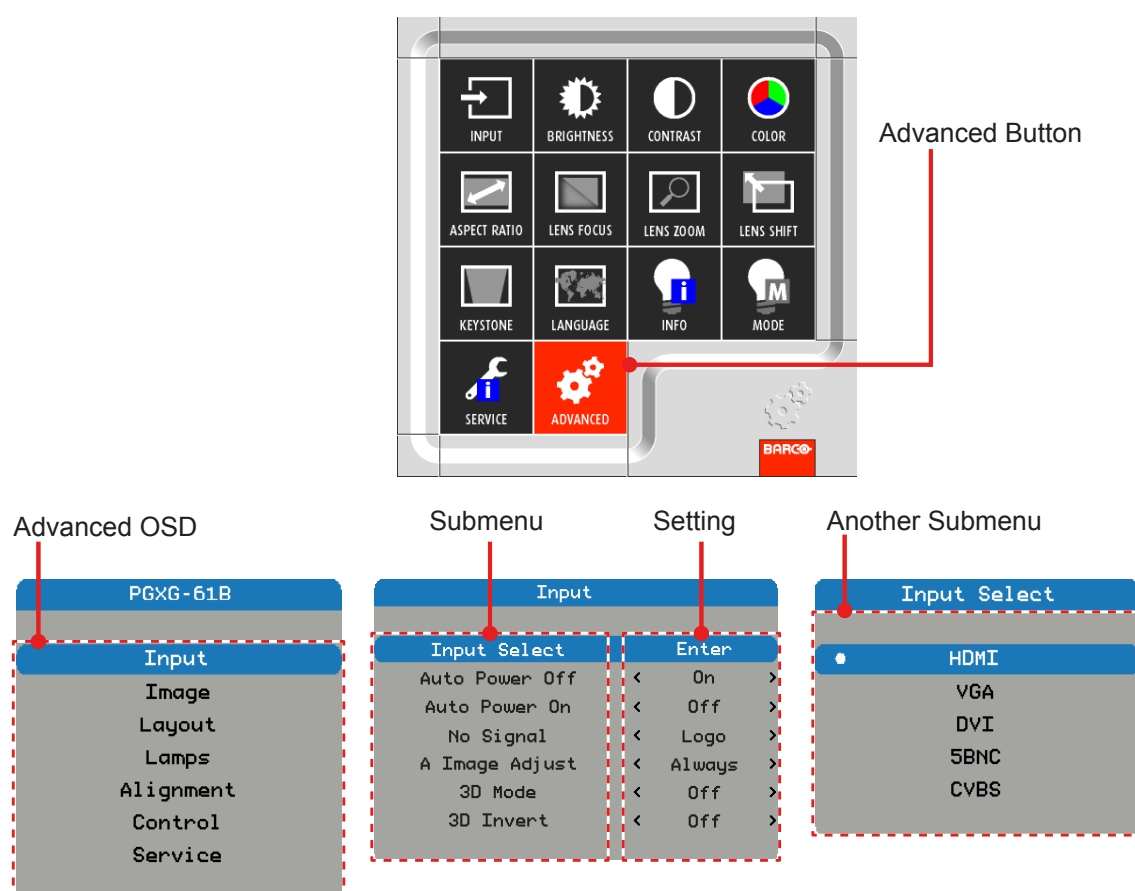
Main menu is on screen, go to button re- quired (Result)		Remote Lite -> OSD Lite (Action -> On Screen)			
Select input manually				go to input desired (default setting = AutoSelect)	> 
Make the image brighter or darker				 	> 
Adapt the contrast be- tween light/dark areas				 	> 
Select color preset most fitted for your image				best condition to view “computer” images (=de- fault image)	
				best option to view movies	
				100% bright	
Adjust aspect ratio				go to aspect ratio desired (default setting = NATIVE)	> 
Adjust focus of image				 	> 
Adjust size of image				 	> 
Adjust position of image				  	> 
Adjust keystone				 	> 
				 	> 
Select language				go to language desired (default setting = ENG- LISH)	> 
Show lamp info					> 
Select lamp mode				go to lamp mode desired (default setting = NOR- MAL)	> 
Show projector info					> 
Enter advanced menu				Press the sequential key : LEFT > LEFT > RIGHT > DOWN buttons to enter advanced menu.	> 

## 4. User Controls

### 4.1.2 Using the Advanced OSD Menus

#### Procedure:

1. Select the Advanced button in OSD Lite Menu then press the sequential key : LEFT > LEFT > RIGHT > DOWN buttons to enter advanced menu.
2. When the advanced OSD displays, use the arrow keys to navigate in the menu and enter to a desired item.
3. Use the UP/DOWN buttons to select the desired item in the submenu and adjust the settings with the LEFT/RIGHT buttons or press ENTER to go to another submenu.
4. Select the next item that you want to adjust in the submenu and adjust it as described above. When each item is adjusted, the projector saves the new setting.
5. Press HOME to return to the previous menu.
6. To exit the OSD menu, press HOME again.





## 4.1.2.1 Input Menu

Input			
Input Select		Enter	
Auto Power Off	<	On	>
Auto Power On	<	Off	>
No Signal	<	Logo	>
A Image Adjust	<	Always	>
3D Mode	<	Off	>
3D Invert	<	Off	>

Input Select

Select the active source, include the following options:

- HDMI
- DVI
- VGA
- 5BNC
- Video

Auto Power Off

Switch off after a while when no sync detected.

- Off: Default value. Disable auto power off function.
- On: Projector will switch off automatically when no signal for 20 minutes.

Auto Power On

The projector turns on automatically when switch on projector after connecting power.

- Off: Default value. The projector stays off when AC power is applied. The user must power on the projector.
- On: The projector turns on automatically when switch on projector after connecting power.

No signal

Select what image displayed when no signal.

- Logo: Default value. Search screen is the factory logo picture.
- Blue: Search screen is solid blue (RGB=0,0,255).
- Black: Search screen is solid black (RGB=0,0,0).
- White: Search screen is solid white (RGB=255,255,255).

A Image Adjust

Select the mode of the auto image menu.

- Always: Default value. Always execute the function of image\Auto image even if the timing is the same as previous source.
- Off: Never execute the function of image\Auto image.
- Auto: Execute the function of image\Auto image when you get a different timing then previous source.

3D Mode

Select the 3D mode

- Off: Default value.
- On: Set "On" to turn 3D settings on for 3D images. Compatible 3D source, 3D content and active shutter glasses are required for 3D viewing.

3D Invert (off & on)

- Off: Default value.
- On: Set 3D invert "On" to invert left and right frame contents.

### 4.1.2.2 Image Menu

IMAGE			
Brightness	<	50	>
Contrast	<	50	>
Saturation	<	50	>
Tint	<	50	>
Sharpness	<	0	>
Noise Reduction	<	0	>
Color Temp	<	Native	>
Input Balance		Enter	
Aspect Ratio	<	Auto	>
Timings		Enter	
Auto Image		Execute	
Display Mode		Presentation	
DA	<	Off	>

#### Brightness

Adjust the brightness of the image.

- Press the ◀ to darken image.
- Press the ▶ to lighten the image.

#### Contrast

Adjust the contrast of the image.

- Press the ◀ to decrease the contrast.
- Press the ▶ to increase the contrast.

#### Saturation

Adjust the color saturation of the image.

**Note: Saturation function supported sources: Composite, Sync on Green.**

- Press the ◀ to decrease the amount of saturation in the image.
- Press the ▶ to increase the amount of saturation in the image.

#### Tint

Adjust the tint (color balance between red and green) of the image.

- Press the ◀ to increase the amount of green in the image.
- Press the ▶ to increase the amount of red in the image.

### Sharpness

Adjust the sharpness of the image.

- Press the ◀ to decrease the sharpness.
- Press the ▶ to increase the sharpness.

### Noise Reduction

Reduce temporary and/or spatial noise in the image.

- Press the ◀ to decrease the noise.
- Press the ▶ to increase the noise.

### Color Temp

Adjust the color temperature of the image.

- Native: Default value. Native is about 5500K.
- 3200K: Apply about 3200K color temperature.
- 5400K: Apply about 5400K color temperature.
- 6500K: Apply about 6500K color temperature.
- 8800K: Apply about 8800K color temperature.

### Input Balance

Adjust the gain and offset of the red, green, or blue channel of the image. This is similar to adjusting contrast, but only affects a single color channel.

- Offset: Refer to the control of color imbalance in the darker areas of the projected image.
- Gain: Refer to the control of color imbalance in the brighter areas of the projected image.
- Press the ◀ to decrease the input balance.
- Press the ▶ to increase the input balance.

### Aspect Ratio

Adjust the aspect ratio of the image.

- 4:3: The input image is resized to a 4:3 aspect ratio.
- 16:10: The input image is resized to a 16:10 aspect ratio.
- Native: the original aspect ratio of the source is kept and fit to screen. This is height or width whatever comes first.
- Auto: Automatically selects the appropriate display format.

### Timings

Adjust the horizontal position, phase or vertical position of the image.

**Note:** *Timings function supported sources: analog computer, analog component.*

- Press the ◀ to decrease the horizontal position, phase or vertical position.
- Press the ▶ to increase the horizontal position, phase or vertical position.

Adjust the film mode, black level or colorspace of the image.

- Black Level NTSC: Set black level of NTSC.
- Format: Select the colorspace format of the source. This depending per input source.

### Auto Image

Execute the auto image adjust.

- Press EXECUTE to adjust the image size, phase and timing automatically.
- Force the projector to reacquire and lock to the input signal. This is useful when signal quality is marginal. After executing this command, the projector will enter the search status. After the signal is reacquired, the image settings (H start, H phase, V start) will be optimized for the input signal.

### Display Mode

Change the sequence and waveform of the image.

- Bright: Default value. This preset provides maximum lumens output.
- Presentation: This preset provides the best possible image for presentation and computer graphics.
- Video: This preset provides the best possible image for video sources (DVD, TV, etc.)

### DA

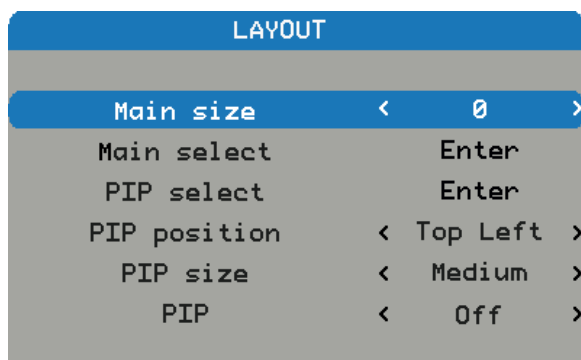
Turn on the DA function to activate the dynamic contrast.

- Off: Default value.
- On: Set DA on.

## 4. User Controls

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### 4.1.2.3 Layout Menu



#### Main Size

Set the size of the main window.

This function is zoom out/cropping image, the location of image will be kept in center.

- Press the ◀ to decrease the main size.
- Press the ▶ to increase the main size.

**Note: Please be noticed that for the PGWU-61B model. When the main size setting is  $\geq 3$  at composite input, the ripple picture symptom can be found.**

#### Main Select

Select the source for the main window.

- HDMI
- DVI
- VGA
- 5BNC
- Video

#### PIP Select

Select the source for the PIP window. This function is grey when PIP is Off.

- HDMI
- DVI
- VGA
- 5BNC
- Video

#### PIP Position

Set the position of the PIP window.

- Top right: Default value for this function.
- Top left
- Bottom left
- Bottom right

#### PIP Size

Set the size of the PIP window.

The PIP size can be different for different input resolutions.

- Small: PIP window is about 1/9 width of the entire display.
- Medium: PIP window is about 1/8 width of the entire display.
- Large: PIP window is about 1/7 width of the entire display.

#### PIP

Activate the PIP window.

**Note: The ripple picture symptom (a bit vibrated behavior) occurred at main picture under 480i, 576i & 1080i while PIP mode activate, is a bandwidth limitation.**

- Off: Default value. The PIP function is disabled and only main window is visible.
- On: The PIP image is on top of the main image.

## 4.1.2.4 Lamps Menu

LAMPS			
Mode	<	ECO	>
High Altitude	<	Off	>
Power	<	0	>
Lamp runtime		0	

Mode

Set lamp mode of the projector.

- Normal: Default value. When set to normal mode, the wattage of the lamp will be at 330W.
- Eco: When set to eco mode, the wattage of the lamp will be at 280W.
- Power: Enable lamp power adjust.

High Altitude

When "On" is selected, the fans will spin faster. This feature is useful in high altitude areas where the air is thin.

- Off: Default value.
- On: Set high altitude mode on.

Power

Set lamp power level of the projector.

**Note: Power function will not be available if you have set the lamp to Eco or Normal modes.**

- Press the ◀ to decrease the power level.
- Press the ▶ to increase the power level.

### 4.1.2.5 Alignment Menu

ALIGNMENT			
Rear projection	<	Off	>
Ceiling mode	<	Off	>
Lens control		Enter	
Keystone	<	0	>
Gamma	<	Film	>
Internal pattern		Enter	
Custom color space		Enter	
Lens to midposition		Execute	

#### Rear Projection

Reverse the image horizontally when the setup is with the projector at the rear of the screen.

- Off: Default value. Projector is in front projection mode.
- On: Projector is in rear projection mode.

#### Ceiling Mode

Reverse the image vertically when the setup is with the projector which is mounted with a ceiling mount.

- Off: Default value. Projector is in the table mode.
- On: Projector is in ceiling mode.

#### Lens Control

- Zoom: Lens zoom.
- Focus: Lens focus.
- Enter to shift: Each time enter is pressed it will go from zoom/focus to shift to zoom/focus.
- Left/Right: Lens shift left/right.
- UP/Down: Lens shift up/down.
- Enter to zoom/focus: Each time enter is pressed it will go from zoom/focus to shift to zoom/focus.

#### Keystone

Adjust vertical keystone.

#### Gamma

Set gamma type.

- Film: for home theater.
- Video: for video or TV source.
- Graphics: for image source.
- Standard: for PC or computer source.

#### Internal Pattern

The projector comes with some standard built-in patterns for testers to calibrate the equipment.

- None
- White
- Grid

#### Custom Color Space

Adjust the .x and .y values of the primary colors and white.

- Red Weighting of Red
- Green Weighting of Red
- Blue Weighting of Red
- Green Weighting of Green
- Red Weighting of Green
- Blue Weighting of Green
- Blue Weighting of Blue
- Red Weighting of Blue
- Green Weighting of Blue
- Red Weighting of White

- Green Weighting of White      • Blue Weighting of White
- Press the ◀ to decrease the custom color space.
- Press the ▶ to increase the custom color space.
- Reset to default: Resets all color points to default value.

### Enable

- Off: Default value.
- On: CCN enable.

### Auto Test Pattern

- Off: Set auto test pattern off
- On: Default value.

### Lens to Midposition

Set the lens in the center/on axis position.

### 4.1.2.6 Control Menu

CONTROL			
Eco network power	<	On	>
RS232 baudrate	<	9600	>
Network		Enter	
Menu position	<	Top Left	>
Auto source	<	Off	>
Language		Enter	

#### Eco Network Power

Switch on/off the network power to save power.

- Off: Default value. Network is enable in standby.
- On: Network is not available in standby.

#### RS232 Baudrate

Select RS232 baudrate.

- 115200: Default value for this function.
- 9600/19200: Other options.

#### Network

View the relevant network information.

- IP Address: Default value is 192.168.0.100.
- Subnet Mask: Default value is 255.255.255.0.
- Gateway
- DHCP: Default value is Off, key in the IP address manually and press APPLY.
- Apply:
  - The DHCP function must be set to "On" and press "Apply" to get the IP address from DHCP server automatically.
  - It takes several seconds to get the IP.
  - In case of fail to get the IP address, please re-apply again.

#### Menu Position

Shift the menu box to a position.

- Center: Default value for this function.
- Top left
- Top right
- Bottom Left
- Bottom right

#### Auto Source

Automatic source searching.

- On: Default value. Automatic source searching is enabled.
- Off: Automatic source searching is disabled.

#### Language

Select the language to display the OSD Menu.

- English
- German
- French
- Spanish
- Simplified Chinese
- Japanese



## 4.1.2.7 Service Menu

SERVICE	
Model	<input type="text"/>
Serial no	<input type="text"/>
Soft version	<input type="text"/>
Main/PIP source	<input type="text"/>
Active resolution	<input type="text"/>
Pixel clock	<input type="text"/>
Vert. refresh	<input type="text"/>
Hor. refresh	<input type="text"/>
Sync type	<input type="text"/>
Color space	<input type="text"/>
Lamp runtime	<input type="text"/>
Lamp hour reset	Enter
Projector runtime	<input type="text"/>
Factory reset	Execute

Model

The designated model number of the projector.

Serial No

The designated serial number of the projector.

Soft Version

The version of software installed on the projector.

Main/PIP Source

Display the current main and PIP sources.

Active Resolution

Display the current resolution of the current source.

Pixel Clock

Display the pixel clock of the current input signal.

Vert. Refresh

Display the current vertical refresh rate of the current source.

Hor. Refresh

Display the current horizontal refresh rate of the current source.

Sync Type

Value is one of the following:

- Separate: Signal has separate H&V syncs.
- Sync on Green: Sync on green channel.
- Composite: Sync embedded in video signal.

Color Space

Display current color space.

Lamp Runtime

Display the current lamp runtime.

Lamp Hour Reset

Reset the hours for lamp to zero.

#### **4. User Controls**

---

##### Projector Runtime

Display the projector's total operating hours.

##### Factory Reset

Set all persistent settings back to default values.

This function will not apply to items including No Signal, Network, Language, Lamp Hours and Projector Hours.

## 5. TROUBLESHOOTING

### Overview

- Image Problems
- LED Indication Chart
- Warning Message



**Note:** If you experience a problem with your projector, please refer to the following information. If a problem persists, please contact your local reseller or service center.

### 5.1 Image Problems

- No image appears on-screen
  - Ensure all the cables and power connections are correctly and securely connected as described in the “Installation” section.
  - Check if all pins are ok in the connector.
  - Check if the projection lamp has been securely installed.

**Note:** This projector can not display 1920\*1200 resolution but only 1920\*1200 RB (reduce blanking).
- Partial, scrolling or incorrectly displayed image
  - If you are using a PC (for Windows 95, 98, 2000, XP, Windows 7):
    - ▶ Open the “My Computer” icon, the “Control Panel” folder, and then double click on the “Display” icon.
    - ▶ Select the “Settings” tab.
    - ▶ Verify that your display resolution setting is lower than or equal to WUXGA (1920 × 1200).
    - ▶ Click on the “Advanced Properties” button. If the projector is still not projecting the whole image, you will also need to change the monitor display you are using. Refer to the following steps.
    - ▶ Verify the resolution setting is lower than or equal to WUXGA (1920 × 1200).
    - ▶ Select the “Change” button under the “Monitor” tab.
    - ▶ Click on “Show all devices”. Next, select “Standard monitor types” under the SP box; choose the resolution mode you need under the “Models” box.
    - ▶ Verify that the resolution setting of the monitor display is lower than or equal to WUXGA (1920 × 1200).
  - If you are using a Notebook:
    - ▶ First, follow the steps above to adjust resolution of the computer.
    - ▶ Press the appropriate keys listed below for your notebook manufacturer to send signal out from notebook to projector. Example: [Fn]+[F4]

Acer ⇒	[Fn]+[F5]	IBM/Lenovo ⇒	[Fn]+[F7]
Asus ⇒	[Fn]+[F8]	HP/Compaq ⇒	[Fn]+[F4]
Dell ⇒	[Fn]+[F8]	NEC ⇒	[Fn]+[F3]
Gateway ⇒	[Fn]+[F4]	Toshiba ⇒	[Fn]+[F5]
Mac Apple:			
System Preference ⇒ Display ⇒ Arrangement ⇒ Mirror display			

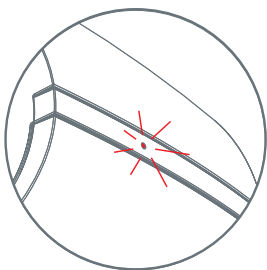
- If you experience difficulty changing resolutions or your monitor freezes, restart all equipment including the projector.
- The recommended resolution per projector is the native resolution so PGXG-61B 1024×768, PGWX-61B 1280×800 and PGWU-61B 1920×1200.
- The screen of the Notebook or PowerBook computer is not displaying your presentation
  - 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 way to be reactivated. Please refer to your computer’s manual for detailed information.

## 5. Troubleshooting

- Image is unstable or flickering
  - Use "TIMINGS\H PHASE" to correct it.
  - Change the monitor color setting on your computer.
- Image has vertical flickering bar
  - Use "AUTO IMAGE" to make an adjustment.
  - Check and reconfigure the display mode of your graphic card to make it compatible with the projector.
- Image is out of focus
  - Adjust lens focus to fit.
  - Make sure the projection screen is between the required distance.
- The image is stretched when displaying 16:9 DVD title
  - 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.
  - If you play 4:3 format DVD titles, please change the format to 4:3 in the projector OSD.
  - If the image is still stretched, you will also need to adjust the aspect ratio by referring to the following:
  - Please setup the display format as 16:9 (wide) aspect ratio type on your DVD player.
- Image is too small or too large
  - Adjust lens zoom to fit. If it does not fill the screen properly, please change the correct lens or change the position of the projector.
- Image has slanted sides
  - Reposition the projector so that it is perpendicular to the screen.
- Lamp burns out or makes a popping sound
  - When the lamp reaches its end of life, it will burn out and may make a loud popping sound. If this happens, the projector will not turn on until the lamp module has been replaced.

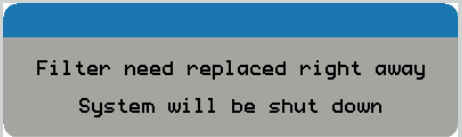
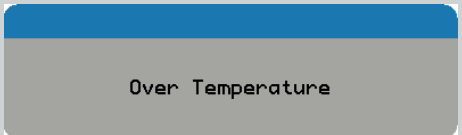
## 5.2 LED Indication Chart



Status LED

	1 sec	1 sec	1 sec	1 sec	1 sec
Off/STBY	[Red bar]				
On	[Red bar]				
Error	[Red bar]	[Red bar]	[Red bar]	[Red bar]	[Red bar]
During Start-up	[Red bar]		[White bar]	[Red bar]	

### 5.3 Warning Message

Message	Description
	<b>Filter Error:</b> When you see the warning message, it means the filter is failed to operate.
	<b>Overheating:</b> When you see the warning message, it means the temperature is over operational temperature.



**Note:** Please contact service people when you see those warning messages!

## 6. MAINTENANCE & SERVICE

### Overview

- Replacing the Lamp
- Replacing the Air Filter
- Replacing the Lens

### 6.1 Replacing the Lamp



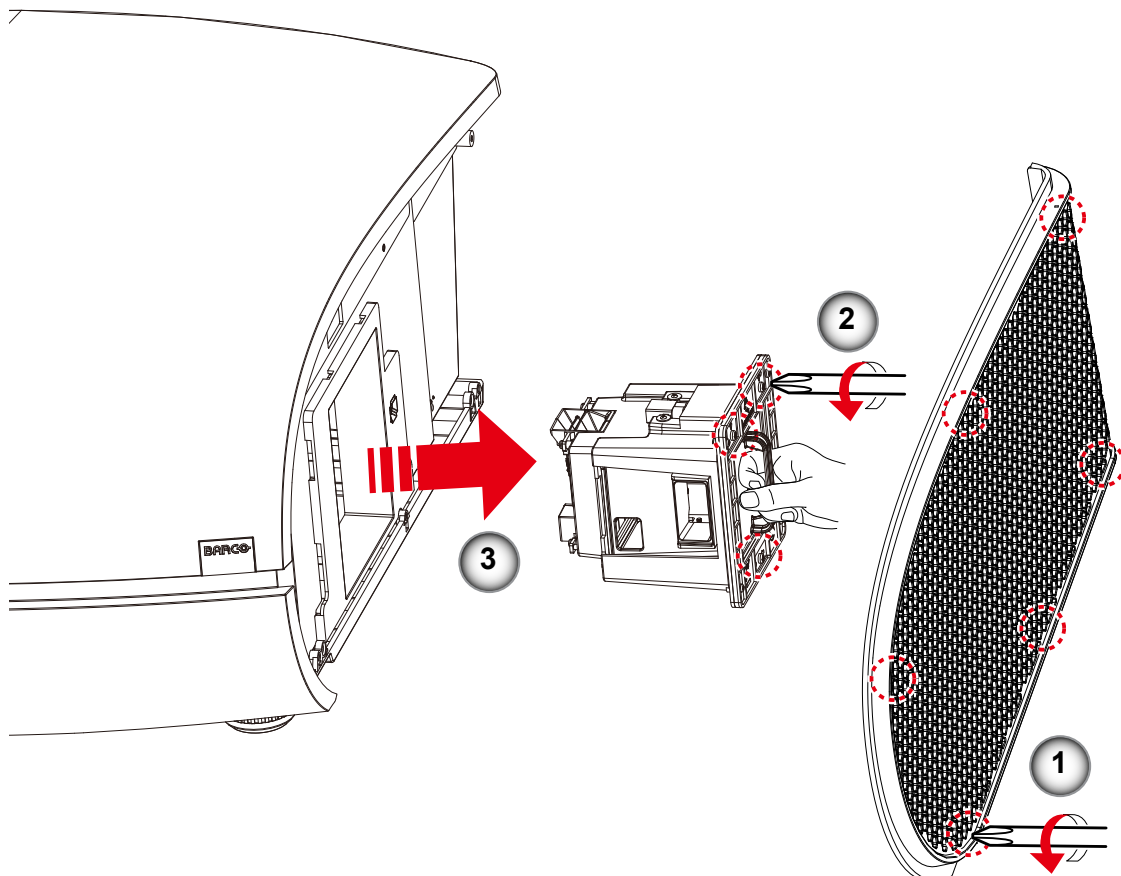
**Warning:** This procedure may only be performed by qualified technical service personnel.

#### Lamp life:

The projector automatically detects the lamp life. When the lamp life is nearing the end of use, you can see the lamp REPLACE information in “Lamp INFO” of OSD lite menu. Make sure the projector has been cooled down for at least 30 minutes before changing the lamp.

#### Procedure:

1. Turn the projector off and unplug the power cord.
2. Allow the projector to cool down for at least 30 minutes.
3. Unscrew the six screws on the cover. ①
4. Lift up and remove the cover.
5. Unscrew the three screws on the lamp module. ②
6. Lift up the lamp handle and remove the lamp module slowly and carefully. ③
7. To replace the lamp module, reverse the previous steps.
8. Turn on the projector and use “Lamp Hour Reset” after the lamp module is replaced.



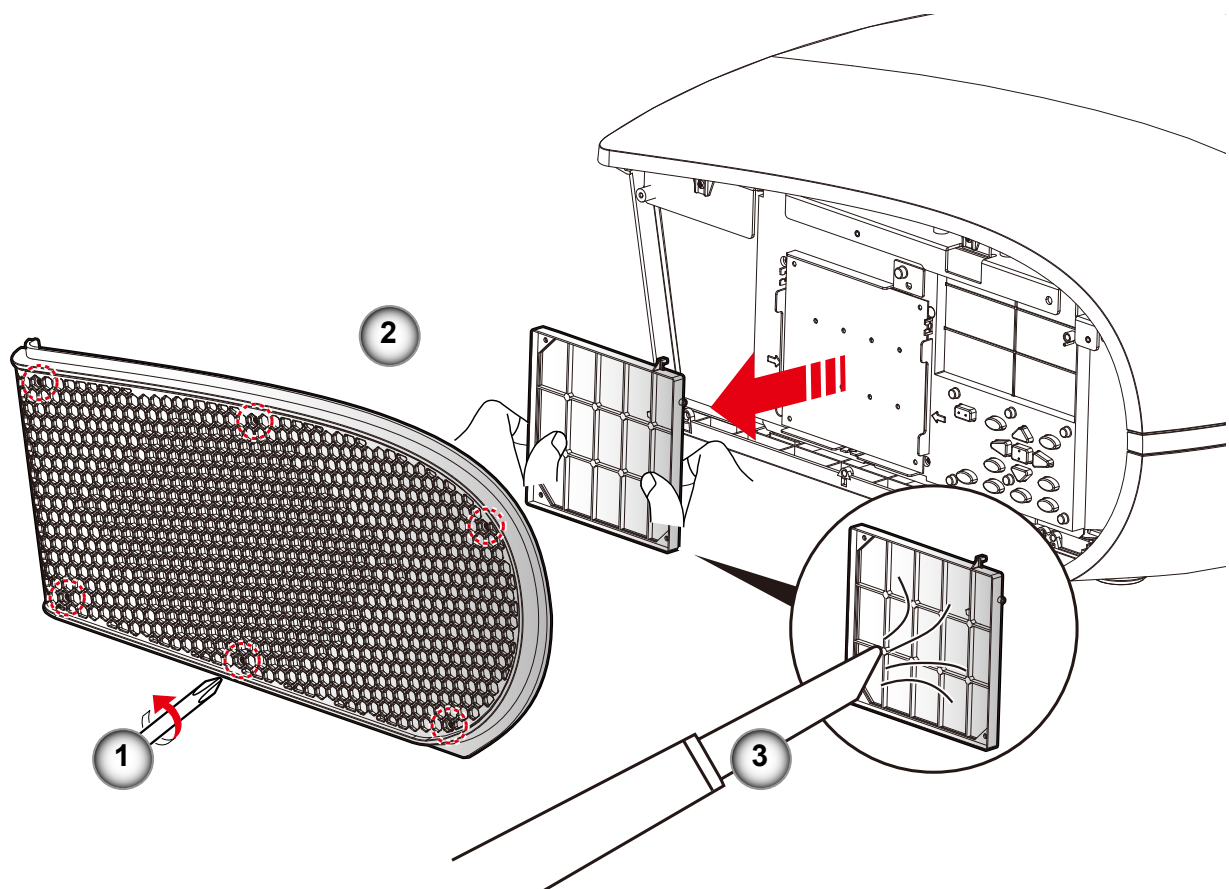
## 6.2 Replacing the Air Filter



**Warning:** This procedure may only be performed by qualified technical service personnel.

### Procedure:

1. Turn the projector off and unplug the power cord.
2. Allow the projector to cool down for at least 30 minutes.
3. Unscrew the six screws on the cover. ①
4. Lift up and remove the cover.
5. Lift up the air filter slowly and carefully. ②
6. Clean or replace the air filter. ③
7. To install the air filter, reverse the previous steps.



**Note:** We recommend cleaning the Air filter every three months; clean it more often if the projector is used in a dusty environment.

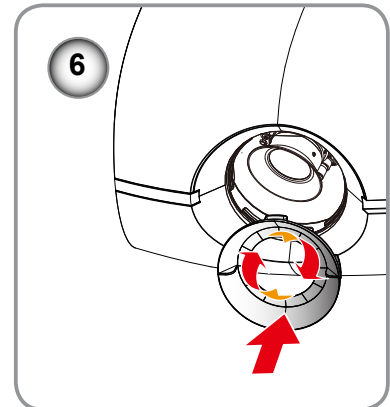
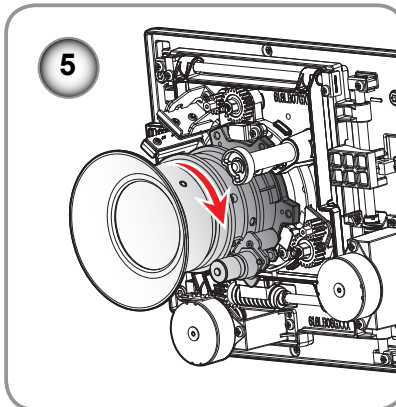
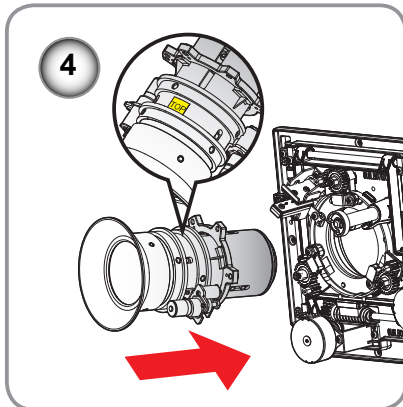
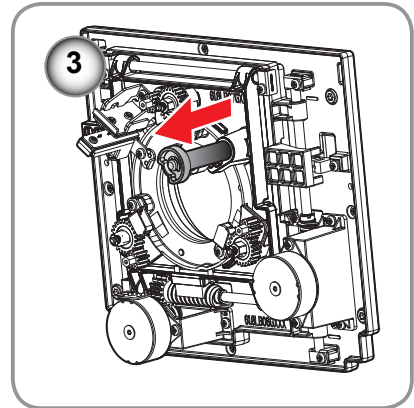
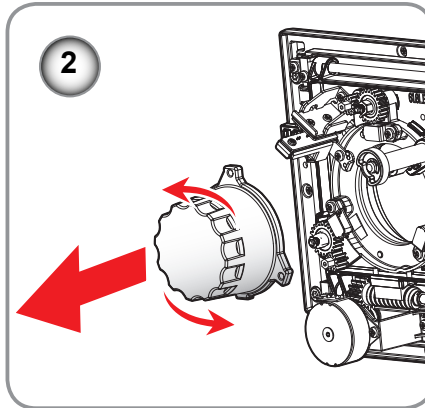
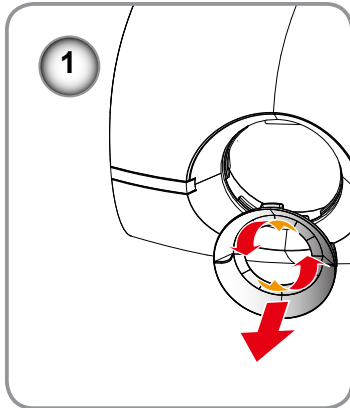
### 6.3 Replacing the Lens



**Warning:** This procedure may only be performed by qualified technical service personnel.

#### Procedure:

1. Turn the projector off and unplug the power cord.
2. Allow the projector to cool down for at least 1 minute then start the lens replacement.
3. Remove the lens ring cover. ①
4. Remove the lens cap counterclockwise. ②
5. Pull the bar to release the lock. ③
6. Be sure the label of lens is upward and then push the lens into the position. ④
7. Rotate the lens clockwise to lock the lens while pull the bar ③ to release the lock. ⑤
8. Put the lens ring cover back to its place. Push rubber fingers over lens edge. ⑥
9. To replace the lens module, reverse the previous steps.
10. Lens cap should be removed before installing. If not it will damage the projector.



**Caution:** Do not transport the projector with any lens installed.



**Note:** Please verify that all the plastic caps removed from the lens prior inserting in the projector.



## 7. SPECIFICATIONS

### Overview

- PGXG-61B
- PGWX-61B
- PGWU-61B
- Dimensions
- Compatibility Modes

### 7.1 PGXG-61B

Specifications	PGXG-61B
Projector type	single-chip DLP projector
Technology	0.7" DMD
Color Wheel	6S standard (RGBYCW)
Resolution	XGA 1024x768
Brightness*	6750 ANSI lumen
Brightness (eco-mode)*	4900 ANSI lumen
Contrast ratio	1100:1
Contrast ratio (Dynamic contrast mode)	4400:1
Brightness uniformity ANSI	80%
Aspect Ratio	4:3
Lens type	G LENS
Lens range	1.26-1.58:1 (1.25X)
	0.99-1.26:1 (1.28X)
	1.58-3.0:1 (1.9X)
Horizontal Lens Shift Range	-28%~+28%
Vertical Lens Shift Range	-100%~+100%
Color correction	CCN ( for 1 chip)
Lamps	1 x 465W Ushio
Lamp lifetime (ECO/Bright)	2000/1500
Transport with lamp	Yes
Sealed DLP™ core	Sealing between TIR prism and DMD

(\*) Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards.

## 7. Specifications

Specifications	PGXG-61B
Optical dowser	n/a
Advance Picture in Picture	Yes
Orientation	table - ceiling
WARP	n/a
Integrated web server	n/a
3D	Yes, TI DLP-Link
Keystone Correction	Yes
Ease of Use	Simplified OSD menu + Remote control
Inputs	G/Y, B/Pb, R/Pr, H/C, V; VGA; CVBS; HDMI-1 v1.3 ; DVI-D
Input Resolutions	up to WUXGA (1920x1200) 60Hz
Software tools	Projection Toolset
Control	IR; RS232; RJ45
Network connection	10/100 Base-T, RJ-45 connection
Power requirements	100 - 240V / 50 - 60 Hz
Power consumption	585W @ 110V; 540W @ 220V
Power consumption in ECO mode	455W@100VAC; 435W@240VAC
Power consumption in standby mode	<0.5W
Noise level Bright mode (typical at 25°C/77°F)	Typical : 40 ± 2 dBA
Noise level ECO mode (typical at 25°C/77°F)	Typical : 35 ± 2 dBA
Operational ambient temperature	5-40°C or 41-104°F (sealevel)
Operating humidity	10-85%
Dimensions (WxLxH)	565 x 475 x 253mm
Weight	17kg
Shipping Dimensions	790 x 580 x 447mm
Shipping Weight from Factory	22kg
Certifications	CB test certificate, US emc, US safety, CE emc and safety, CCC emc and safety"
Warranty	3 years standard warranty**

(\*\*) Warranty and service conditions can differ from region to region. Contact your local sales or service representative for more details.

## 7.2 PGWX-61B

Specifications	PGWX-61B
Projector type	single-chip DLP projector
Technology	0.65" DMD
Color Wheel	6S standard (RGBYCW)
Resolution	WXGA 1280x800
Brightness*	6200 ANSI lumen
Brightness (eco-mode)*	4500 ANSI lumen
Contrast ratio	1100:1
Contrast ratio (Dynamic contrast mode)	4000:1
Brightness uniformity ANSI	85%
Aspect Ratio	16:10
Lens type	G LENS
Lens range	1.28-1.60:1 (1.25X)
	1.00-1.28:1 (1.28X)
	1.61-3.07:1 (1.9X)
Horizontal Lens Shift Range	-28%~+28%
Vertical Lens Shift Range	-100%~+100%
Color correction	CCN ( for 1 chip)
Lamps	1 x 465W Ushio
Lamp lifetime (ECO/Bright)	2000/1500
Transport with lamp	Yes
Sealed DLP™ core	Sealing between TIR prism and DMD
Optical dowser	n/a
Advance Picture in Picture	Yes
Orientation	table - ceiling
WARP	n/a
Integrated web server	n/a
3D	Yes, TI DLP-Link

(\*) Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards.

## 7. Specifications

Specifications	PGWX-61B
Keystone Correction	Yes
Ease of Use	Simplified OSD menu + Remote control
Inputs	G/Y, B/Pb, R/Pr, H/C, V; VGA; CVBS; HDMI-1 v1.3 ; DVI-D
Input Resolutions	up to WUXGA (1920x1200) 60Hz
Software tools	Projection Toolset
Control	IR; RS232; RJ45
Network connection	10/100 Base-T, RJ-45 connection
Power requirements	100 - 240V / 50 - 60 Hz
Power consumption	585W @ 110V; 540W @ 220V
Power consumption in ECO mode	455W@100VAC; 435W@240VAC
Power consumption in standby mode	<0.5W
Noise level Bright mode (typical at 25°C/77°F)	Typical : 40 ± 2 dBA
Noise level ECO mode (typical at 25°C/77°F)	Typical : 35 ± 2 dBA
Operational ambient temperature	5-40°C or 41-104°F (sealevel)
Operating humidity	10-85%
Dimensions (WxLxH)	565 x 475 x 253mm
Weight	17kg
Shipping Dimensions	790 x 580 x 447mm
Shipping Weight from Factory	22kg
Certifications	CB test certificate, US emc, US safety, CE emc and safety, CCC emc and safety"
Warranty	3 years standard warranty**

(\*\*) Warranty and service conditions can differ from region to region. Contact your local sales or service representative for more details.

## 7.3 PGWU-61B

Specifications	PGWU-61B
Projector type	single-chip DLP projector
Technology	0.67" DMD
Color Wheel	6S standard (RGBYCW)
Resolution	WUXGA 1920x1200
Brightness*	5900 ANSI lumen
Brightness (eco-mode)*	4250 ANSI lumen
Contrast ratio	1100:1
Contrast ratio (Dynamic contrast mode)	4800:1
Brightness uniformity ANSI	85%
Aspect Ratio	16:10
Lens type	G LENS
Lens range	1.22-1.53:1 (1.25X)
	0.95-1.22:1 (1.28X)
	1.52-2.92:1 (1.9X)
Horizontal Lens Shift Range	-28%~+28%
Vertical Lens Shift Range	-100%~+100%
Color correction	CCN ( for 1 chip)
Lamps	1 x 465W Ushio
Lamp lifetime (ECO/Bright)	2000/1500
Transport with lamp	Yes
Sealed DLP™ core	Sealing between TIR prism and DMD
Optical dowser	n/a
Advance Picture in Picture	Yes
Orientation	table - ceiling
WARP	n/a
Integrated web server	n/a
3D	n/a

(\*) Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards.

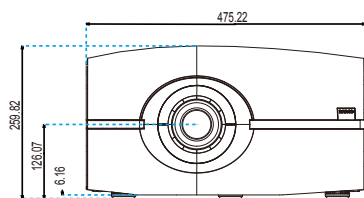
## 7. Specifications

Specifications	PGWU-61B
Keystone Correction	Yes
Ease of Use	Simplified OSD menu + Remote control
Inputs	G/Y, B/Pb, R/Pr, H/C, V; VGA; CVBS; HDMI-1 v1.3 ; DVI-D
Input Resolutions	up to WUXGA (1920x1200) 60Hz
Software tools	Projection Toolset
Control	IR; RS232; RJ45
Network connection	10/100 Base-T, RJ-45 connection
Power requirements	100 - 240V / 50 - 60 Hz
Power consumption	585W @ 110V; 540W @ 220V
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Operational ambient temperature	5-40°C or 41-104°F (sealevel)
Operating humidity	10-85%
Dimensions (WxLxH)	565 x 475 x 253mm
Weight	17kg
Shipping Dimensions	790 x 580 x 447mm
Shipping Weight from Factory	22kg
Certifications	CB test certificate, US emc, US safety, CE emc and safety, CCC emc and safety"
Warranty	3 years standard warranty**

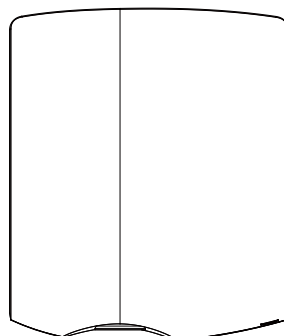
(\*\*) Warranty and service conditions can differ from region to region. Contact your local sales or service representative for more details.

## 7.4 Dimensions

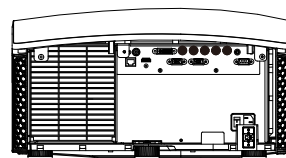
### Projector Outer Dimensions



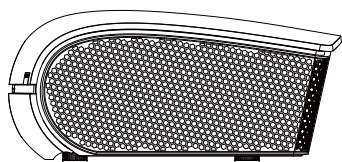
Front View



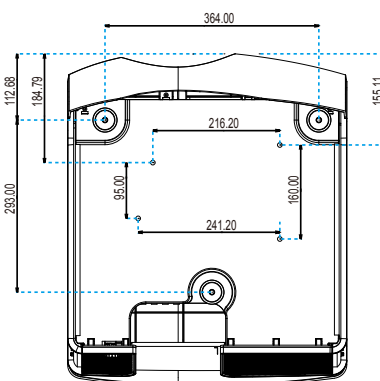
Top View



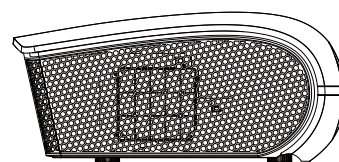
Rear View



Left Side View



Bottom View



Right Side View

Dimensions given in millimeters.


**WARNING:**

- Be sure to use the correct screw size. Screw size will vary depending on the thickness of the mounting plate.
- Be sure to keep at least 10 cm gap between the ceiling and the bottom of the projector.
- Avoid installing the projector near a heat source.

## 7.5 Compatibility Modes

Signal	Resolution	Frequency		Video	Digital	Analog	Remark
		H. (KHz)	V. (Hz)				
NTSC	--	15.734	60	○	--	--	
PAL/SECAM	--	15.625	50	○	--	--	
	640×350	31.5	70.1	--	○	○	70Hz
	640×400	37.9	85.1	--	○	○	85Hz
VGA	640×480	31.5	60	--	○	○	
	640×480		67	--	○	○	
	640×480	37.9	72.8	--	○	○	72Hz
	640×480	37.5	75	--	○	○	
	640×480	43.3	85	--	○	○	
SVGA	800×600	35.2	56.3	--	○	○	56Hz
	800×600	37.9	60.3	--	○	○	60Hz
	800×600	46.9	75	--	○	○	
	800×600	48.1	72.2	--	○	○	72Hz
	800×600	53.7	85.1	--	○	○	85Hz
XGA	1024×768	48.4	60	--	○	○	
	1024×768	56.5	70.1	--	○	○	70Hz
	1024×768	60	75	--	○	○	
	1024×768	68.7	85	--	○	○	
HD720	1280×720		50	--	○	○	
	1280×720		60	--	○	○	
WXGA	1280×768	47.776	60	--	○	○	
	1280×768		75	--	○	○	
	1280×768		85	--	○	○	
WXGA-800	1280×800		60	--	○	○	
	1280×960		60	--	○	○	
	1280×960		75	--	○	○	
	1280×960		85	--	○	○	
	1440×900		74.98	--	○	○	
SXGA	1280×1024	64	60	--	○	○	
	1280×1024	80	75	--	○	○	
	1280×1024	91.1	85	--	○	○	
SXGA+	1400×1050		60	--	○	--	
UXGA	1600×1200	75	60	--	○	○	
HD1080	1920×1080		24	--	○	○	
	1920×1080		50	--	○	○	
	1920×1080		60	--	○	○	
WUXGA	1920×1200		60	--	○	○	Only support [RB] timing



Signal	Resolution	Frequency		Video	Digital	Analog	Remark
		H. (KHz)	V. (Hz)				
HDTV	1920×1080	33.8	30	○	--	--	
	1920×1080	28.1	25	○	--	--	
	1920×1080i	28.125	50	--	○	○	
	1920×1080i	33.75	60	--	○	○	
	1920×1080p		24	--	○	○	
	1920×1080p		25	--	○	○	
	1920×1080p		30	--	○	○	
	1920×1080p		50	--	○	○	
	1920×1080p		60	--	○	○	
	1280×720	45	60	○	--	--	
	1280×720p		50	--	○	○	
	1280×720p		60	--	○	○	
SDTV	720×576	31.3	50	○	--	--	
	720×576i	15.625	50	--	○	○	
	720×576p		50	--	○	○	
	720×480	31.5	60	○	--	--	
	720×480i	15.734	60	--	○	○	
	720×480p	31.5	60	--	○	○	

### 3D Timing - 120 Hz Frame Sequential

Input Source Resolution	Frame Rate in Hz (Vertical Frequency)	Line Rate in KHz (Horizontal Frequency)	Pixel Clock in MHz
SVGA (800×600)	119.63	76.92	83.725
XGA (1024×768)	120.13	98.87	139.276
720p (1280×720)	120.31	92.88	161.997

# 8. ENVIRONMENTAL INFORMATION

### Overview

- Disposal information
- RoHS compliance

## 8.1 Disposal information

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### Disposal Information

Waste Electrical and Electronic Equipment



■ This symbol on the product indicates that, under the European Directive 2002/96/EC governing waste from electrical and electronic equipment, this product must not be disposed of with other municipal waste. Please dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

For more information about recycling of this product, please contact your local city office or your municipal waste disposal service.

For details, please visit the Barco website at:  
<http://www.barco.com/en/AboutBarco/weee>

### Disposal of batteries in the product



■ This product contains batteries covered by the Directive 2006/66/EC which must be collected and disposed of separately from municipal waste.

If the battery contains more than the specified values of lead (Pb), mercury (Hg) or cadmium (Cd), these chemical symbols will appear below the crossed-out wheeled bin symbol.

By participating in separate collection of batteries, you will help to ensure proper disposal and to prevent potential negative effects on the environment and human health.

### Mercury Notice



Lamp(s) Contain Mercury.  
Dispose According to  
Local, State, Federal Law.

This Barco product consists of materials that may contain mercury, which must be recycled or disposed of in accordance with local, state, or country laws:

- Within this system, the lamp in the projector contains mercury.

## 8.2 RoHS compliance

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### Turkey RoHS compliance



■ Türkiye Cumhuriyeti: EEE Yönetmeliğine Uygundur.

[Republic of Turkey: In conformity with the EEE Regulation]

**中国大陆RoHS (Information for China ROHS compliance)**

根据中国大陆《电子信息产品污染控制管理办法》(也称为中国大陆RoHS), 以下部份列出了本产品中可能包含的有毒有害物质或元素的名称和含量。



Table of toxic and hazardous substances/elements and their content, as required by China's management methods for controlling pollution by electronic information products.

**Hazardous Substances Or Elements / 有毒有害物质或元素**

Component Name / 部件名称	Lead (Pb) / 铅 (Pb)	Mercury (Hg) / 汞 (Hg)	Cadmium (Cd) / 镉 (Cd)	Chromium VI Compounds (Cr VI) / 六价铬 (Cr VI)	Polybrominated Biphenyls (PBB) / 多溴联苯 (PBB)	Polybrominated Diphenyl Ethers (PBDE) / 多溴二苯醚 (PBDE)
Case/Enclosure / 机壳	O	O	O	O	O	O
Printed Circuit Assembly / 电子电路 组件*	X	O	O	O	O	O
Chassis / 底座	O	O	O	O	O	O
Engine / 引擎	O	O	O	O	O	O
Hardware / 硬件	O	O	O	O	O	O
Optics / 光学器件	X	O	O	O	O	O
Lamp / 灯泡	O	X	O	O	O	O

\* : Printed Circuit Assembly includes all Printed Circuit Boards (PCBs) and their respective population of discrete components, ICs, and connectors.  
\* : 电子电路组件包括所有包括所有印刷电路板(PCB)及其各自的离散组件、IC 及连接器。

O : Indicates the hazardous and toxic substance content of the part is lower than the threshold defined by the SJ/T11364-2006 standard.  
O : 表明该部件所含有害和有毒物质含量低于 SJ/T11364-2006 标准定义的阈值。

X : Indicates the hazardous and toxic substance content of the part is over the threshold defined by the SJ/T11364-2006 standard. In all cases where an X is shown, Barco uses an allowable exemption per EU RoHS.  
X : 表明该部件所含有害和有毒物质含量高于 SJ/T11364-2006 标准定义的阈值。对于所有显示为“X”的情况, Barco 按照 EU RoHS 采用了容许的豁免指标。

**Production Address**

No.20, 3rd Ave, Kunshan Free Trade Zone,  
Jiangsu, P.R. China