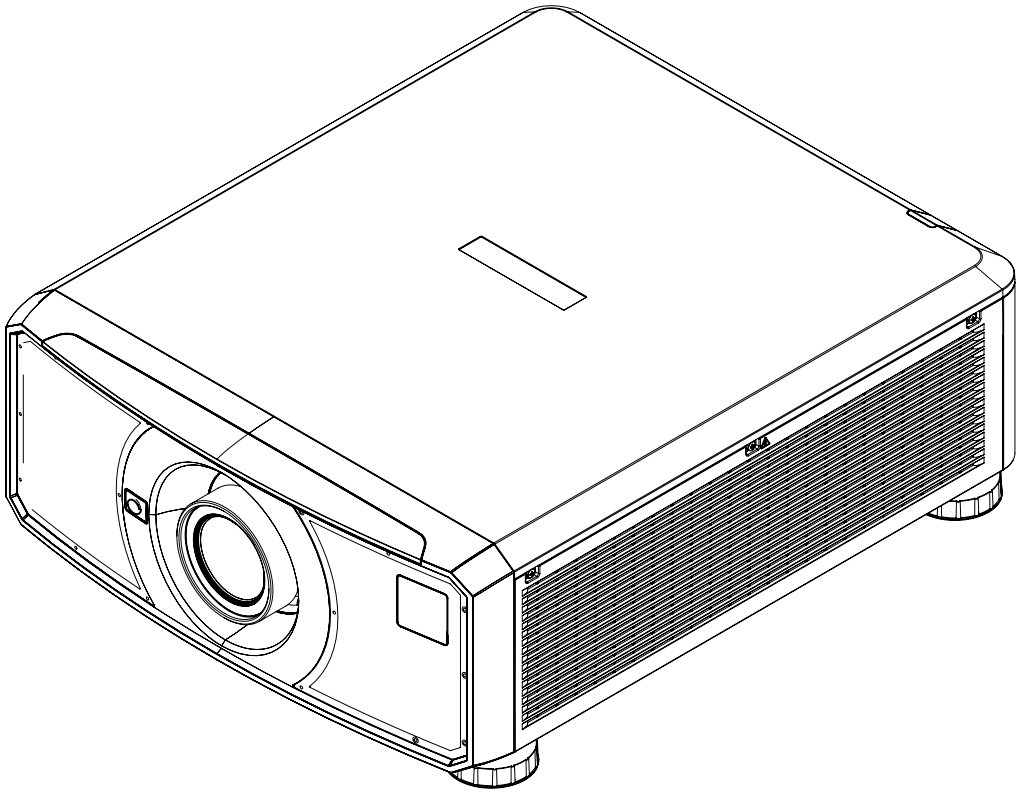


# **DIGITAL** **PROJECTION**

## ***E-Vision Laser 15000 Series***

### IMPORTANT INFORMATION



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## Symbols used in this document

Some information in this document may be accompanied by the following symbols:



**LASER WARNING:** this symbol indicates that there is a potential hazard of eye exposure to laser radiation unless the instructions are closely followed.



**LIGHT HAZARD WARNING:** this symbol indicates that there is a danger of exposure to intensive light that may result in personal injury unless the instructions are closely followed.



**ELECTRICAL WARNING:** this symbol indicates that there is a danger of electrical shock unless the instructions are closely followed.



**WARNING:** this symbol indicates that there is a danger of physical injury to yourself and/or damage to the equipment unless the instructions are closely followed.



**NOTE:** this symbol indicates that there is some important information that you should read.

## Additional Documentation

Full information about operating, connecting and setting up the projector can be found in the User Guides.

Please use the QR code (also located on the projector) to access the latest E-Vision projector user guides and other documentation via the Digital Projection website.



Or visit the products specification page on the Digital Projection website to download the latest user guide and other documentation.

## Legal notice

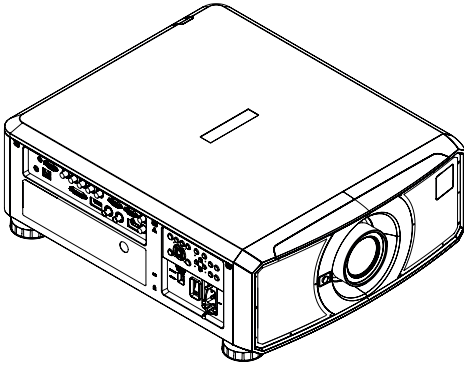
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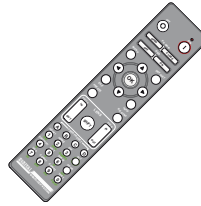
## Third Party Credits

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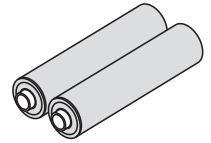
**What's in the box?**



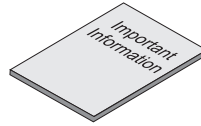
**Projector**



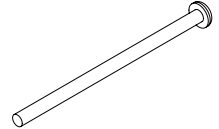
**Remote Control**



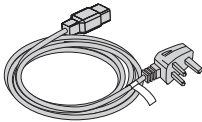
**Batteries (2xAAA)**



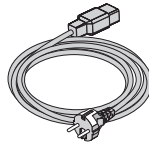
**Important Information Book**



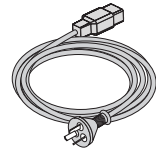
**Security Screw**



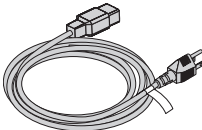
**Power Cable, UK**



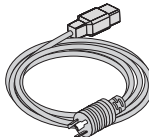
**Power Cable, Europe**



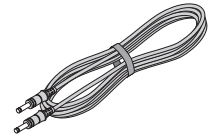
**Power Cable, China**



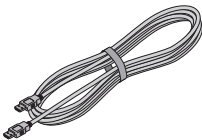
**NEMA 5-15P - C19 Power Cable, North America**



**NEMA L6-20P - C19 Power Cable, North America**



**Remote Control Cable**



**HDMI Cable**

## Electrical and Physical Specifications

Mains Voltage	200-240 VAC 8.2A 50/60Hz 100-130 VAC 11.9A 50/60Hz
Operating Temperature	0°C to 35°C (32°F to 95°F), 35°C to 40°C (95°F to 104°F) with reduced light output
Storage Temperature	-20°C to 60°C (-4°F to 140°F)
Operating Humidity	10% to 90% non-condensing
Storage Humidity	10% to 90% non-condensing
Dimensions	L:598.3mm (23.55in) X W: 500mm (19.68in) X H 218.5mm (8.6in)
Weight	29.5 kg (65 lb) without lens
Power Consumption	at 110 VAC: 1025 W (Normal mode) at 110 VAC: 990 W (Eco mode) at 110 VAC: 1070 W (High Altitude mode) at 240 VAC: 1570 W (Normal mode) at 240 VAC: 1165 W (Eco mode) at 240 VAC: 1590 W (High Altitude mode)
Standby Power	< 0.5W (Network Off), < 6W (Network On)
Thermal Dissipation	at 110 VAC: 3497 BTU/hr (Normal mode) at 110 VAC: 3378 BTU/hr (Eco mode) at 110 VAC: 3650 BTU/hr (High Altitude mode) at 240 VAC: 5357 BTU/hr (Normal mode) at 240 VAC: 3975 BTU/hr (Eco mode) at 240 VAC: 5425 BTU/hr (High Altitude mode)
Fan Noise	48 dBA Max, 46 dBA Typical (Normal mode) 45 dBA Max, 43 dBA Typical (Eco mode) 59 dBA Max, 57 dBA Typical (High Altitude mode) 48 dBA Max, 46 dBA Typical (High Altitude Quiet mode)



*Specifications are subject to change without notice.*



## General Precautions



**Warning! Death or Serious Injury could occur if the following precautions are ignored**



**Eye Hazard! Do not look directly into the lens when the light source is on. The high brightness can cause permanent eye damage**



**Fire Hazard! Keep any combustible material away from hot surfaces and the projected beam. Ensure cables do not contact hot surfaces**



**Shock Hazard! Use only authorised components, tools, accessories and replacement parts specified by the manufacturer**



**Trip Hazard! Locate cables where they cannot be pulled, tripped over or damaged by persons or objects**

**Operate the product in the specified operating environment and conditions**

**Product should be powered off and disconnected from the mains before any service or maintenance operation**

**Keep body parts, hair, clothing and jewellery away from moving parts in the product.**

**Do not operate the product without a lens installed**

**Use a lens plug when installing or moving the product**



**The unit is never to be operated if the unit is defective or the cover or seal is damaged.**



**No maintenance allowed by end user.**

**Do not open the cabinet. There are no user serviceable parts inside.**

**No service is allowed except by authorized personnel.**

**Use only the power cable provided.**



**Ensure that the power outlet includes a Ground connection, as this equipment **MUST** be earthed.**



Take care to prevent small objects such as paper or wire from falling into the projector. If this does happen, switch off immediately, and have the objects removed by authorised service personnel.



Do not expose the projector to rain or moisture, and do not place any liquids on top of the projector.

Unplug before cleaning, and use a damp, not wet, cloth.

Do not touch the power plug with wet hands.

Do not touch the power plug during a thunder storm.

Handle the power cable carefully and avoid sharp bends. Do not use a damaged power cable.



Do not touch the ventilation outlets, as they will become hot in use.

Do not cover or obstruct the ventilation outlets or inlets.

Do not cover the lens whilst the projector is switched on. This could cause a fire.

Always allow the projector to cool for 5 minutes before disconnecting the power or moving the projector.

Never use strong detergents or solvents such as alcohol or thinners to clean the projector and lens.

## Laser Safety Precautions



**Warning! Death or Serious Injury could occur if the following precautions are ignored**



**Permanent/Temporary Blindness Hazard**



**Not for household use.**

**Class 1 RG3 Laser Product. No direct exposure to the beam shall be permitted, RG3 IEC 62471-5:2015.**

**Operators shall control access to the beam within the hazard distance or install the product at a height that will prevent exposure of the spectator's eyes within the hazard distance.**

**The product should be installed and operated in accordance with the provisions of IEC 62471-5:2015 and the Important Information document or User Manual by instructed and skilled persons only (IEC 62368-1:2020).**

**Caution – use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.**

**Lens Change should only be carried out by instructed and skilled persons in accordance with the Important Information document or User Manual. If in doubt consult your dealer.**

**Ensure the projector is switched off and AC power removed before attempting a lens change**

**Do not attempt to operate the product without covers in place.**

**This product (MLS) has a built in Class 4 laser module. Do not attempt to disassemble or modify the laser module.**

**Do not look directly into the lens when the light source is on. The high brightness can cause permanent eye damage.**

**Laser Parameters**

Wavelength (Red)	635nm - 647nm
Wavelength (Blue)	450nm - 460nm
Mode of operation	Pulsed, due to frame rate
Pulse duration (Red)	1.6ms
Pulse duration (Blue)	0.87ms
Maximum pulse energy (Red)	0.72mJ
Maximum pulse energy (Blue)	0.45mJ

## Compliance with International Standards



### RF Interference

#### FCC

The Federal Communications Commission does not allow any modifications or changes to the unit EXCEPT those specified by Digital Projection in this manual. Failure to comply with this government regulation could void your right to operate this equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant with Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area may cause harmful interference, in which case the user will be responsible for correcting any interference.

### Noise

#### GSGV Acoustic Noise Information Ordinance

The sound pressure level is less than 48 dB (A) at normal operating mode according to ISO 3744 or ISO 7779.

### European Waste Electrical and Electronic Equipment (WEEE) Directive



Digital Projection Ltd is fully committed to minimising Waste Electrical and Electronic Equipment. Our products are designed with reuse, recycling and recovery of all components in mind. To this end, at end of life, your projector may be returned to Digital Projection Ltd or its agent so that the environmental impact can be minimised.

Product Labels

Projector

<b>DIGITAL PROJECTION</b> DLP Projector / DLP Projecteur (數位投影機 / 数字投影机)		Caution: Do not open the cover. No user-serviceable parts inside. Avertissement: ne pas ouvrir le couvercle. Le produit ne contient aucune pièce réparable par l'utilisateur. 警告: 請勿打開外殼, 設備內無服務性維修之元件。 警告: 請勿打開外殼, 設備內無服務性維修之元件。 This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.	
<b>DLP PROJECTOR / DLP Projecteur (數位投影機 / 数字投影机)</b>		Model / Modème(型號 / 型号): <b>E-Vision Laser 15000 WU</b>	
AC Input / Entrée CA(輸入 / 輸入): <b>200-240V ~ 50/60Hz 8.2A</b>		AC Input / Entrée CA(輸入 / 輸入): <b>100-130V ~ 50/60Hz 11.9A</b>	
警告: 此為 A 類產品, 在生活環境中, 該產品可能會造成無線電干擾。在這種情況下, 可能需要用戶對接收設備採取可行的措施。 警告: 此為 A 類產品, 在生活環境中, 該產品可能會造成無線電干擾。在這種情況下, 可能需要用戶對接收設備採取可行的措施。 警告: 請勿打開外殼, 設備內無服務性維修之元件。 警告: 請勿打開外殼, 設備內無服務性維修之元件。 請掃描QR碼來取得投影機的文件 請掃描QR碼來取得投影機的文件		제품명: 프로젝터 인증번호: E-15000-01P-EV15000WU ZL100002-20008 상호용/제조사: 영탁일렉트로닉스(주) 제조사명: YUKUMMAGDO 제조공정/제조사: 영탁 일렉트로닉스 (영탁) (주)리더티/중국 A/S 센터: +82 2 515 5303 모델명: E-Vision Laser 15000 WU Delta Electronics (Jiangsu) Ltd. No.1688, Jiangxing East Rd. Wujiang Economic and Technological Development Zone, Suzhou City, Jiangsu Province, P.R.C 215209	
製造商: Digital Projection Limited Greenway Way, Malvern, Worcestershire, MK4 1XX UK 0121 717 3000 2154665330		Part No.: 120-99AA Code 39 or 126 (serial No.) XXXXXXXXXXXXXXX MANUFACTURED: YYYY.MM.DD 製造商/中國: 製造商/中國 Made in China	

Manufacturers ID Label

Complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007	Complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007
<b>LASER RADIATION</b> AVOID DIRECT EYE EXPOSURE CLASS 3R LASER PRODUCT Emitted Wavelength: 450-460 nm (Blue) max pulse energy : 0.45 mJ (Blue) Pulse duration : 0.87 ms (Blue) Emitted Wavelength: 635-647 nm (Red) max pulse energy : 0.72 mJ (Red) Pulse duration : 1.6 ms (Red)	<b>RAYONNEMENT LASER</b> EXPOSITION DIRECTE DANGEREUSE POUR LES YEUX APPAREIL A LASER DE CLASSE 3R longueur d'onde : 450-460 nm (Bleu) maximum énergie de impulsion : 0.45 mJ (Bleu) durée de impulsion : 0.87 ms (Bleu) longueur d'onde : 635-647 nm (Rouge) maximum énergie de impulsion : 0.72 mJ (Rouge) durée de impulsion : 1.6 ms (Rouge)
GB 7247.1-2012 / IEC 60825-1:2007 <b>CLASS 1 LASER PRODUCT</b> PRODUIT LASER DE CLASSE 1 IEC/EN 60825-1:2014 IEC/EN 62471-5:2015	GB 7247.1-2012 / IEC 60825-1:2007 <b>一类激光产品</b> 第一类激光产品 IEC/EN 60825-1:2014 IEC/EN 62471-5:2015
Warning! Do not look into the beam. No direct eye exposure to the beam is permitted. RG3 Hazard Distance : 3 m Avertissement! Ne Pas Regarder Directement Dans Le Faisceau. L'exposition Directe Des Yeux Au Faisceau Est Interdite. RG3 Distance À Risque : 3 m	警告! 請勿直視鏡頭。 眼睛不要直接暴露於光輻射。 RG3 危險距離: 3 公尺 警告! 請勿直視鏡頭。 眼睛不要直接暴露於光輻射。 RG3 危險距離: 3 米

Explanatory Label

Laser Aperture Label

User Guides Label

DO NOT let a laser beam directly enter the projector lens.

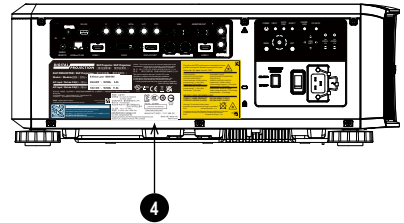
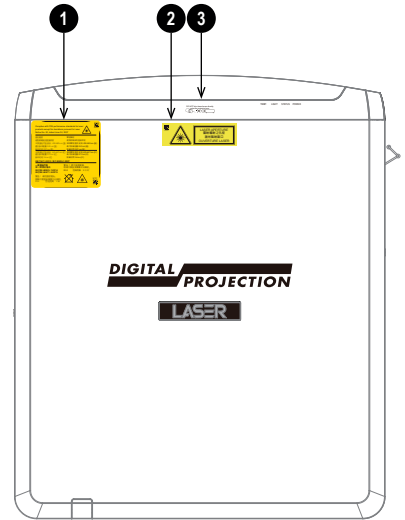


Lens Safety Label

## Label Locations

### Projector

1. Location of Explanatory Label with Certification Statement and Risk Statement on the body of the projector.
2. Location of Hazard Warning Symbol and Laser Aperture Label on the body of the projector.
3. Location of Lens Safety Label on the body of the projector.
4. Location of Manufacturer's ID Label, User Guides Label and Explanatory Label with Certification Statement and Risk Statement on the body of the projector.

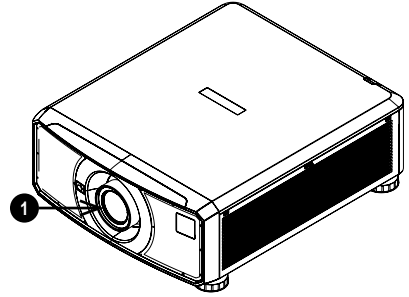


## Location of Laser Aperture

1. The laser aperture is located as indicated below.



**Be careful not to expose the eye to direct laser light.**

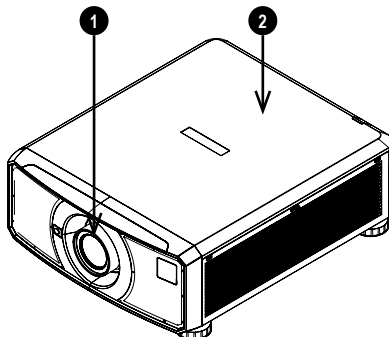




## Interlock Switches

Interlock switches are installed at the main frame, inside the cover. These will power-off the system individually when activated.

1. Will be activated when the projection lens is removed or misplaced.
2. Will be activated when the top cover is removed.



## Installation Precautions



The projector must be installed only by suitably qualified personnel, in accordance with local building codes.

The projector is heavy. Use safe handling techniques when lifting the projector.

Do not drop or knock the projector.

Do not install the projector close to anything that might be affected by its operational heat, for instance, polystyrene ceiling tiles, curtains etc.

Place the projector in a dry area away from sources of dust, moisture, steam, smoke, sunlight or heat.

Ensure that the intake vents do not recycle hot air from the exhaust vent.

When operating the projector in an enclosed space, ensure that the surrounding air temperature within the enclosure does not exceed operation temperature while the projector is running, and the air intake and exhaust vents are unobstructed.

All enclosures should pass a certified thermal evaluation to ensure that the projector does not recycle exhaust air, as this may cause the device to shutdown even if the enclosure temperature is with the acceptable operation temperature range.

Avoid installing at high temperature, insufficient cooling and heavy dust locations. Keep your product away from fluorescent lamps (>1 Meter) to avoid malfunction caused by IR interference.

Avoid installing near an air conditioner duct or a subwoofer.

The projector should be installed as close to the power outlet as possible.

The power connection should be easily accessible, so that it can be disconnected in an emergency.

Please pay attention to projector installation with respect to other staging laser light equipment set-up. These systems can cause permanent damage to the DMD imaging devices used in our projectors. This damage is not covered by our warranty.

When using projectors in environments with third party high power laser systems avoid direct laser beams pointing towards the projection lens. This may cause incident light to converge into the optical engine and cause damage to the DLP DMD.

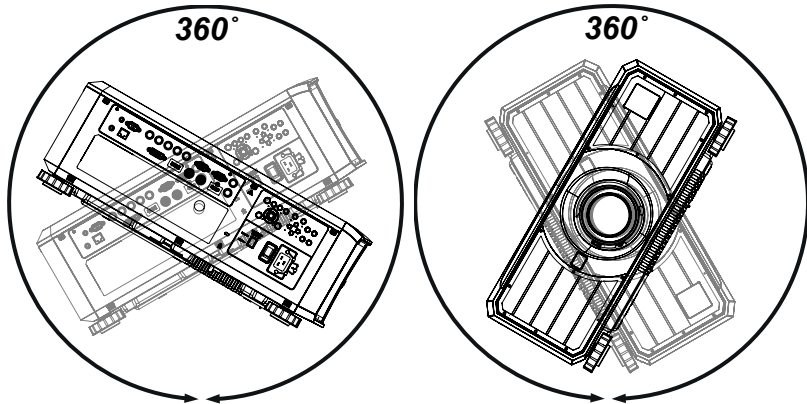


Before installation, make sure that the surface, ceiling or rigging that is to support the projector is capable of supporting the combined weight of the projector and lens.

Backup safety chains or wires should always be used with ceiling mount installations.

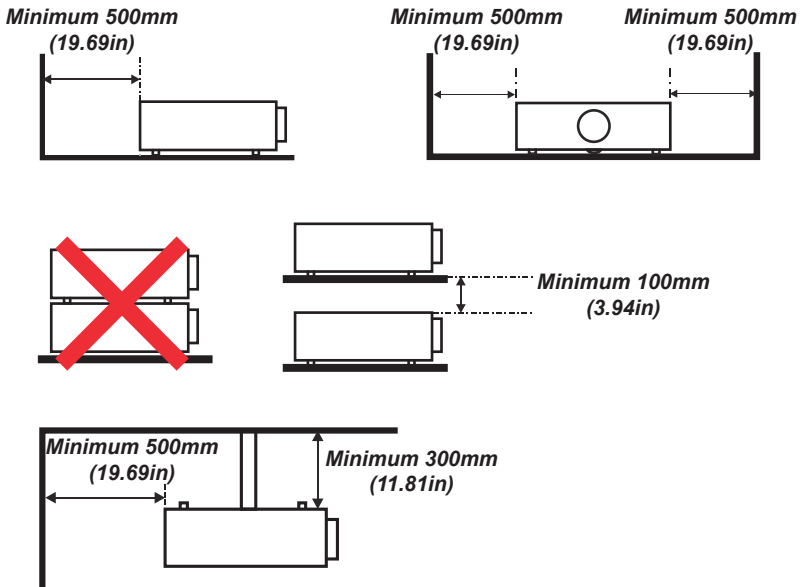
When installing a ceiling mount, make sure the weight limit is not exceeded and the projector is firmly secured.

The projector can be operated any position, as shown in the diagram:



*Tilt (Left) and Roll (Right)*

Allow at least 50cm (19.7in) of space between the ventilation outlets and any wall, and 30cm (11.8in) on all other sides.

**Example Positioning**

Make sure the lens cap is removed from the lens before operating the projector. Light energy levels have been known to cause damage to both the lens and projector optics. This damage is not covered by our warranty.

Make sure the lens cap is removed from the rear of the lens before it is inserted into the projector.

Connect the LAN cable only to a computer LAN connection. Other similar connectors may have a dangerously high voltage source.

A VGA IN connector should be used to connect to the VGA IN port on the projector. It should be inserted tightly, with the screws on both sides securely fastened to ensure proper connection of the signal wire for achieving optimal display effect.

The power cord and signal cable should be connected before the projector is powered on. During startup and operation, DO NOT insert or remove the signal cable or the power cord to avoid damaging the projector.

Turn on High Fan Speed Mode when located in high altitude areas.



The projector generates heat during use. The internal fans dissipate the heat of the projector when shutting down, which could continue for a certain period. After the projector enters **STANDBY MODE**, remove the power cord. **DO NOT** remove the power cord during shutdown as it may cause damage to the projector and may affect the service life of the projector.

Do not place heavy objects on top of the projector chassis.

## Risk Group 3 Laser Hazard Installation Precautions



This product is a risk group 3 laser product. It must be installed in a safe place and must be handled by qualified and professionally trained personnel.

Do not attempt to access the internal hardware of the projector. Do not attempt to modify or remove the laser module.

Do not operate the projector without its protective covers.

Do not operate the projector without a lens installed.

Please consult with a qualified professional to install or remove the lens.

FDA regulations require that a lens hood is permanently fitted when using the 3.58-5.38:1 lens or the 5.31-8.26:1 lens with the projector in the United States of America. Fitting can be provided by your reseller or System Integrator.

### Light Hazard Warning



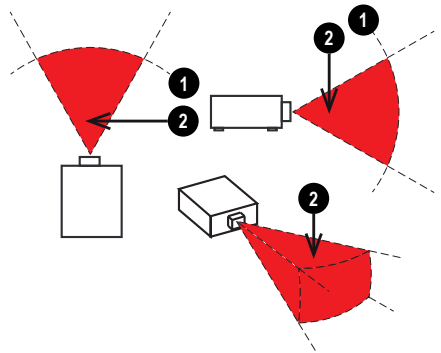
No direct exposure to the beam is permitted, RG3 IEC 62471-5:2015.

### Light Hazard Distance and Hazard Zone

The hazard distance is the distance measured from the projection lens at which the intensity or energy per unit of surface is lower than the applicable exposure limit on the cornea or skin. ①

The hazard zone is the area from the projection lens up to the hazard distance that encompasses where the projected beam is considered hazardous. ②

If the person is within the hazard zone, the beam is considered unsafe for exposure.



Operators should control access to the beam within the hazard distance or install the projector at sufficient height to prevent exposures of spectators' eyes within the hazard area.

When the projector is installed overhead, allow a minimum of 3m between the floor surface and the Light Hazard Zone.

The hazard distance for this projector is 3 m.

## Fitting a lens



The projector must be fully turned off prior to attempting a lens change.



When changing the lens, avoid using excessive force as this may damage the equipment.

Avoid touching the surface of the lens as this may result in image impairment.



*FDA regulations require that a lens hood (p/n:121-867) is permanently fitted when using the 3.58 - 5.38 : 1 zoom lens or the 5.31 - 8.26 : 1 zoom lens with the E-Vision Laser 15000 projector in the United States of America. Fitting can be provided by your reseller or System Integrator.*



*The lens is shipped separately.*



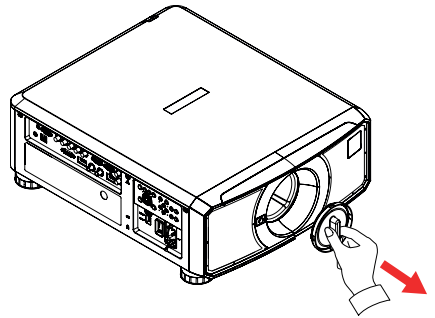
*Take care to preserve the original lens packaging and protective caps for future use.*



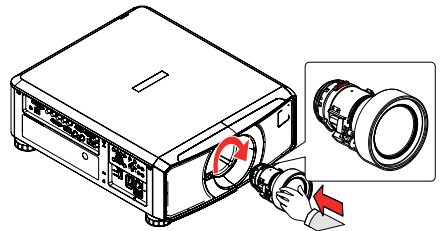
*The projector will not turn on the light source without a lens fitted*

## Inserting a new lens

1. Remove the lens aperture cap or lens from the projector. See Removing the lens on the next page for guidance on removing a lens.

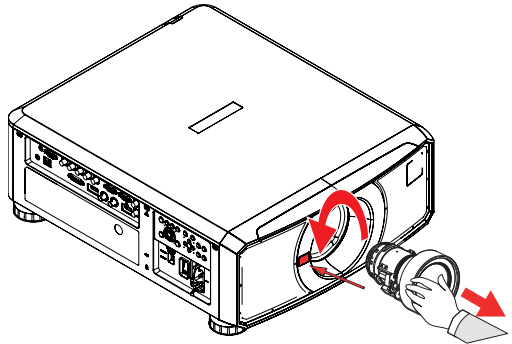


2. Remove the front and rear lens caps from the lens.
3. Position the lens so that the labels are at the top, and gently insert it all the way into the lens mount.
4. Push the lens in firmly and turn it clockwise until it clicks into place.



## Removing the lens

1. Push the lens release button all the way in
2. Turn the lens anti-clockwise until it disengages
3. Slowly remove the lens
4. Fit lens caps to the front and rear of the lens
5. Fit a lens cap or a new lens to the projector. See Inserting a new lens on the previous page for guidance on inserting a lens.



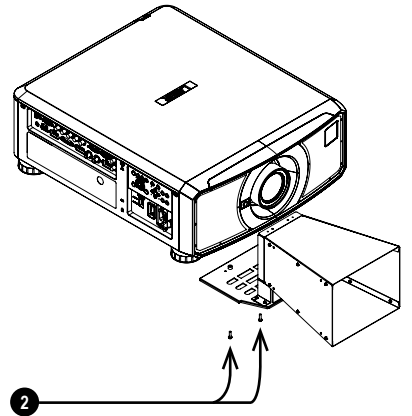
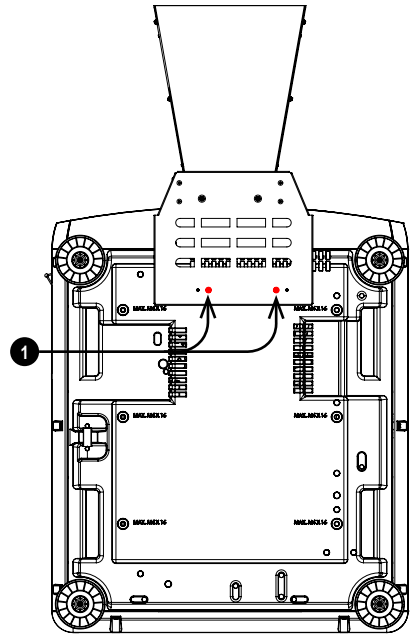


## Fitting a lens hood

A lens hood can be fitted to the projector after the lens is inserted.

1. Place the hood over the lens and align the screw holes on the hood with the holes on the bottom of the projector **1**.
2. Screw in the two M4x16 screws **2** to secure the hood to the projector.

*FDA regulations require that a lens hood (p/n:121-867) is permanently fitted when using the 3.58 - 5.38 : 1 zoom lens or the 5.31 - 8.26 : 1 zoom lens with the E-Vision Laser 15000 projector in the United States of America. Fitting can be provided by your reseller or System Integrator.*



## Positioning the screen and projector

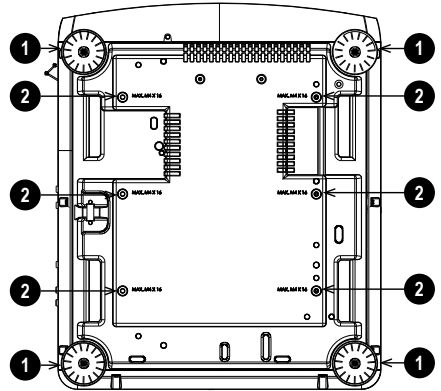
1. Install the screen, ensuring that it is in the best position for viewing by your audience.
2. Mount the projector, ensuring that it is at a suitable distance from the screen for the image to fill the screen. Set the adjustable feet so that the projector is level, and perpendicular to the screen.

The drawing shows the positions of the feet for table mounting, and the fixing holes for ceiling mounting.

1. Four adjustable feet **1**.
2. **Six M4 holes for ceiling mount 2**.  
The screws should not penetrate more than 16 mm into the body of the projector.



**Do not use the threaded holes for the adjustable feet to hang or mount the projector.**



## AC Power Precautions



**Warning!** Death or Serious Injury could occur if the following precautions are ignored

**Shock Hazard!** Only use the AC power cord provided or recommended by the manufacturer

**Fire & Shock Hazard!** Do not operate the product unless the power cord, socket and plug meet local rating standards

Do not attempt operation if the AC supply is not within the specified parameters

The AC power cord must be inserted into a socket with grounding

Disconnect the product from the AC supply before installing, moving, servicing, cleaning or removing covers

Do not use an AC power cord that appears damaged

Do not overload power sockets or extension cords

### Connecting the power supply

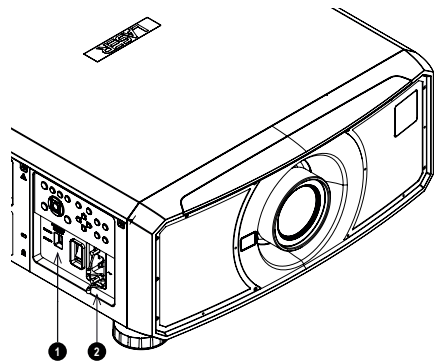
1. Adjust the VOLTAGE SELECT switch to the required voltage **1**
2. Firmly push the mains connector into the AC In socket **2**



**Use only the power cable provided.**

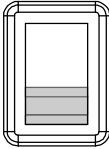
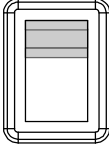
Ensure that the power outlet includes a ground connection as this equipment **MUST** be earthed.

Handle the power cable carefully and avoid sharp bends. Do not use a damaged power cable.





## Voltage selection

The VOLTAGE SELECT switch must be set to match the power supply you are using:

Voltage of power supply used	Position of VOLTAGE SELECT switch
AC100-130V outlet	<p data-bbox="426 276 543 300">200-240 V~</p>  <p data-bbox="426 368 543 392">100-130 V~</p>
AC200-240V (single phase) outlet	<p data-bbox="426 443 543 467">200-240 V~</p>  <p data-bbox="426 536 543 560">100-130 V~</p>

## Operation and Configuration Precautions

 Do not make changes to the networking configuration unless you understand what you are doing, or have taken advice from your Network Manager. If you make a mistake, it is possible that you will lose contact with the projector. Always double-check your settings before pressing the APPLY button. Always keep a written note of the original settings, and any changes you have made.

 Software updates should NOT be carried out except by, or with the supervision of, Digital Projection Service personnel.

## Basic Operating Instructions

### Switching the projector on

1. Ensure a lens is fitted. Connect the power cable between the mains supply and the projector.
2. Switch on at the switch next to the power connector.
3. Press one of the following buttons:
  - On the remote control, the **ON** button
  - On the projector control panel, the **POWER** button.

The **POWER** indicator begins flashing green and the fans start working. When the flashing stops and the **POWER** and **LIGHT** indicators both light steady green, the projector is switched on.

### Switching the projector off

1. Press **OFF** on the remote control or **POWER** on the control panel, then press again to confirm your choice.  
The **POWER** indicator on the control panel will start flashing amber, the system will go out and the cooling fans will run for a short time until the **POWER** indicator goes steady red to indicate that the projector has entered STANDBY mode.
2. If you need to switch the projector off completely, switch off at the mains power switch next to the power connector and then disconnect the power cable from the projector.

### Interlock reset

In the event of the laser illumination turning off as a result of an Interlock break:

1. Make sure all interlocks are in place. See Interlock Switches on page 17
2. Turn ON the laser illumination as above

### Selecting an input signal

1. Connect one or more image sources to the projector.
2. Select the input you want to display:
  - Press one of the input buttons on the remote control.
  - Alternatively, open the On-screen display (OSD) by pressing **MENU**. Highlight **Input** from the main menu, press **ENTER/OK** and then select an input signal using the **UP** and **DOWN** arrow buttons. Press **ENTER/OK** to confirm your choice.

## Selecting a test pattern

The following test patterns are available: White, Black, Red, Green, Blue, Checkerboard, White Crosshatch, Red Crosshatch, Green Crosshatch, Blue Crosshatch, Color Bar, Screen Layout, Off

To display a test pattern:

- Press **TEST** on the remote control.  
Change the test pattern using the **LEFT** and **RIGHT** arrow buttons.
- Alternatively, open the OSD by pressing **MENU**. Highlight **Test Patterns** from the main menu, then select a test pattern using the **LEFT** and **RIGHT** arrow buttons.

After the final test pattern, the projector exits test pattern mode and returns to the main image. To view test patterns again, you need to press **TEST** again. If you wish to exit the test patterns before you reach the final one, press **TEST** or **EXIT** at any time.

## Adjusting the lens

You can use the following options to adjust the lens:

- Control panel. See Control panel on page 33
- Remote control. See Remote control on page 35
- On screen display (OSD). See Lens menu on page 1

### OSD Lens menu

The **Lens** menu provides access to the **Lens Control** setting and the **Lens Center** command.

**Lens Control** allows **Zoom**, **Focus** and **Shift** adjustments using the arrow buttons. The setting operates in **Zoom/Focus Adjustment** and **Shift Adjustment** mode.

Press **ENTER/SELECT** to switch between the two modes.

## Adjusting the image

### Orientation

This can be set from the **Setup** menu.

Highlight **Orientation** and choose from **Front Tabletop**, **Front Ceiling**, **Rear Tabletop**, **Rear Ceiling** and **Auto-front**.

### Geometry

Settings such as **Keystone**, **Rotation**, **Pincushion / Barrel** and **Arc** can be set from the **Geometry** menu.

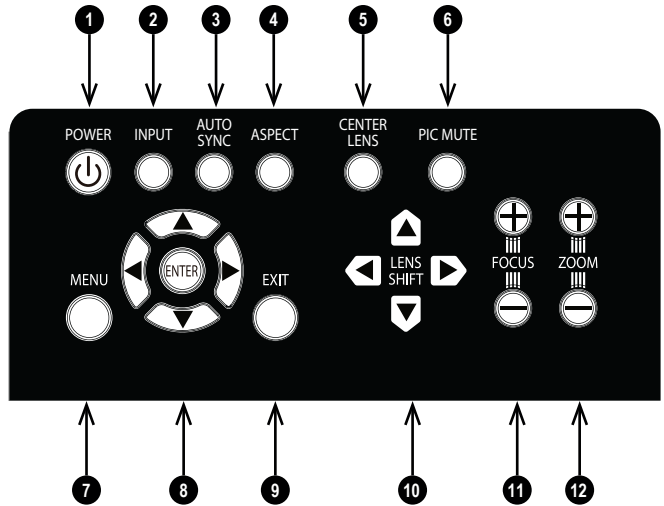
### Picture

Settings such as **Gamma**, **Brightness**, **Contrast**, **Saturation**, **Hue** and **Sharpness** can be set from the **Image** menu.



## Control panel

1. **POWER**  
Switches the projector on and off (STANDBY).
2. **INPUT**  
Displays the input selection menu.
3. **AUTO SYNC**  
Re-synchronises with the current input signal.
4. **ASPECT**  
Changes the aspect ratio.
5. **CENTER LENS**  
Centers the lens.
6. **PIC MUTE**  
Shows and hides the projected image. When muted, the light source is completely switched off and the screen is blank.
7. **MENU**  
Displays and exits the OSD.
8. **Arrow buttons & ENTER**  
Press an arrow button to open the keystone menu. Use the arrow buttons to adjust vertical and horizontal keystone. After opening the OSD, use the arrow buttons to highlight menu entries. Press **ENTER** to open or execute the highlighted menu entry.
9. **EXIT**  
Exits the current OSD page and enters the level above.
10. **LENS SHIFT**  
Arrow buttons move the lens in the specified direction.
11. **FOCUS**  
Plus and minus buttons move the focus in and out.
12. **ZOOM**  
Plus and minus buttons zoom in and out.



*Control Panel*

## Projector indicators

- **TEMP.**

Off = no problem

Flashing red = temperature error

- **LIGHT**

Off = light is switched off

Flashing green (cycles of single flashes) = shutter is on and light is temporarily off

Flashing red (cycles of single flashes) = light cannot be ignited during warm up

Flashing red (cycles of double flashes) = light extinguished during normal operation

On, amber = light is in forced ECO mode at high temperature

On, green = light is switched on

- **STATUS**

Off = no problem

Flashing amber (cycles of double flashes) = request to perform lens calibration

Flashing green (cycles of double flashes) = lens calibration in progress

Flashing red (cycles of single flashes) = cover error

Flashing red (cycles of double flashes) = TEC/color sensor problem

Flashing red (cycles of four flashes) = fan error

On, red = system error

- **POWER**

Off = the projector is switched off

Flashing green = the projector is warming up

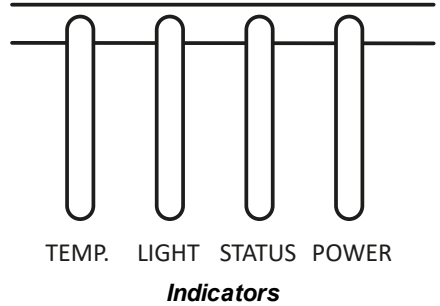
Flashing amber = the projector is cooling down to standby mode

Flashing red = the projector is preparing to go into network standby mode

On, red = standby mode, power saving without network control

On, amber = standby mode, power saving with network control

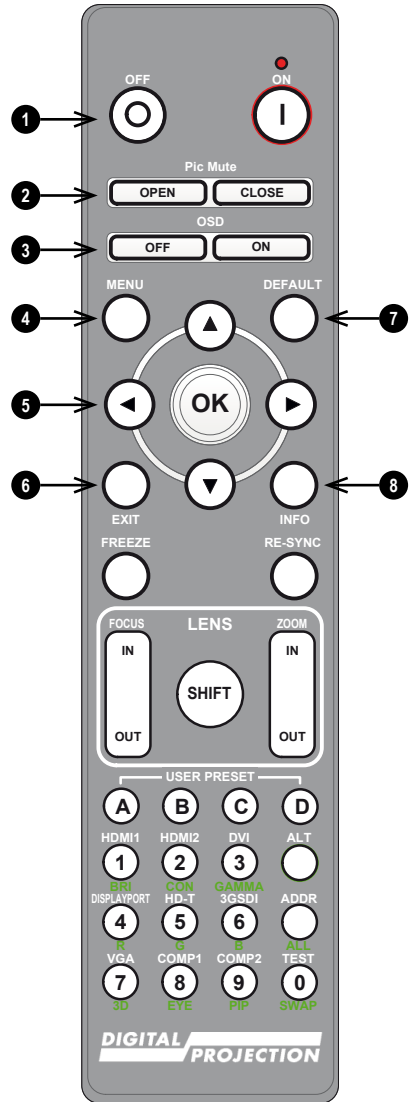
On, green = the projector is switched on



\*See the user manual for full details about the indicator messages

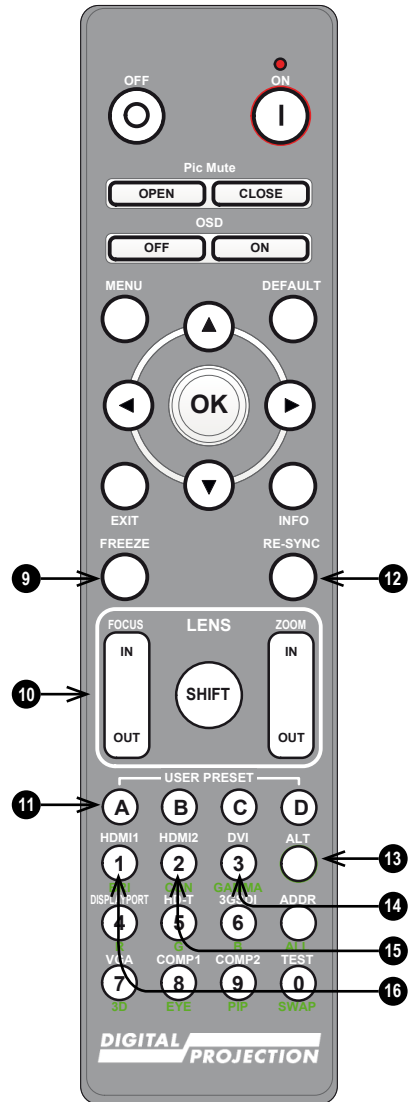
## Remote control

1. **Power ON / OFF**  
Turns power on and off.
2. **Pic Mute OPEN / CLOSE**
  - Press CLOSE to hide the projected image. When closed, the light source is completely switched off and the screen is blank.
  - Press OPEN to display the hidden image.
3. **OSD ON / OFF**  
Enable and disable screen timeout messages and control whether to show the OSD during projection.
4. **MENU**  
Access the on screen display (OSD). If the OSD is open, press this button to go back to the previous menu.
5. **Navigation (arrows and OK)**  
Navigate through the menus with the arrows, confirm your choice with **OK**. In lens adjustment modes, the arrows are used to shift, zoom or focus the lens.  
See **11** below. In lens adjustment modes, or when the OSD is not showing, the OK button switches between modes: **Shift Adjustment** and **Zoom / Focus Adjustment**.
6. **EXIT**  
Go up one level in the OSD. When the top level is reached, press to close the OSD.
7. **DEFAULT**  
When editing a parameter, press this button to restore the default value.
8. **INFO**  
Access information about the projector.



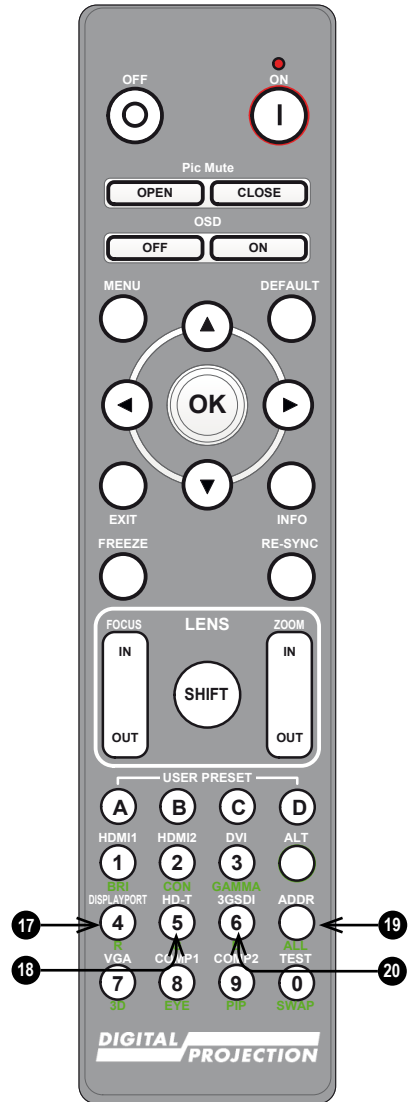
*Remote Control*

9. **FREEZE**  
Freeze the current frame.
10. **LENS adjustment**
  - **FOCUS IN / OUT:** adjust focus.
  - **SHIFT:** press and hold this button, then use the Navigation arrow buttons to move the lens.
  - **ZOOM IN / OUT:** adjust zoom.
11. **USER PRESET A, B, C, D**  
Load user presets.
12. **RE-SYNC**  
Re-synchronise with the current input signal
13. **ALT**  
Press and hold this button to access alternative functions for other buttons on the remote.
14. **DVI / GAMMA / numeric input 3**  
Select the DVI input.  
Use with ALT to switch to the next Gamma value:  
...1.0, 1.8, 2.0, 2.2, 2.35, 2.5...
15. **HDMI 2 / CON / numeric input 2**  
Select the HDMI 2 input.  
Use with ALT to bring up the Contrast control, then adjust the value with the LEFT and RIGHT arrow buttons.
16. **HDMI 1 / BRI / numeric input 1**  
Select the HDMI 1 input.  
Use with ALT to bring up the Brightness control, then adjust the value with the LEFT and RIGHT arrow buttons.



Remote Control

17. **DISPLAYPORT 1 / R / numeric input 4**  
Select DisplayPort 1 input.
18. **HD-T / G / numeric input 5**  
Select the HDBaseT input.
19. **ADDR / ALL (with red indicator at the top)**  
Assign and unassign an IR remote address.  
**To assign an IR remote address:**
  1. Press and hold this button until the red indicator starts flashing.
  2. Release this button and while the red indicator is still flashing, enter a two-digit address using the numeric input buttons. The indicator will flash three times quickly to confirm the change.**To unassign an address and return to the default address 00:**
  1. Press and hold ALT and this button simultaneously until the red indicator flashes to confirm the change.
20. **3GSDI / B / numeric input 6**  
Select the 3G-SDI input.



Remote Control

- 21. **VGA / 3D / numeric input 7**  
 Select the VGA input.  
 Use with **ALT** to toggle the 3D Format setting between Off and Auto.
- 22. **COMP1 / EYE / numeric input 8**  
 Select the Component 1 input.  
 Use with **ALT** to switch between left and right eye 3D dominance.
- 23. **TEST / SWAP / numeric input 0**  
 Show a test pattern. Press again to show the next test pattern: White, Black, Red, Green, Blue, Checkerboard, White Crosshatch, Red Crosshatch, Green Crosshatch, Blue Crosshatch, Color Bar, Screen Layout, Off  
 When **PIP** mode is on, use this button with **ALT** to swap the main and sub images.
- 24. **COMP2 / PIP / numeric input 9**  
 There is no Component 2 input on this projector.  
 Use with **ALT** to switch on **Picture In Picture (PIP)** mode.



Remote Control