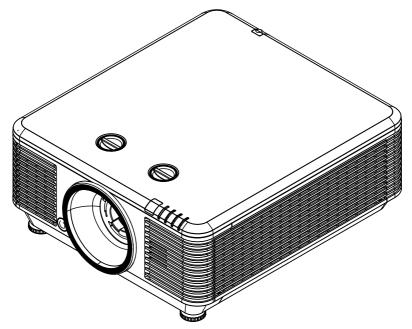


# E-Vision Laser 6500 Series

3



Super High Brightness Digital Video Projector **Important Information** 

Rev A April 2016 117-856A

### Important Information

# **Digital Projection**

### **Digital Projection Limited**

Greenside Way, Middleton Manchester M24 1XX, UK

Registered in England No. 2207264 Registered Office: as above

Tel (+44) 161 947 3300 Fax (+44) 161 684 7674

enquiries@digitalprojection.co.uk service@digitalprojection.co.uk

www.digitalprojection.co.uk

### Digital Projection Inc.

55 Chastain Road, Suite 115 Kennesaw, GA 30144, USA

Tel (+1) 770 420 1350 Fax (+1) 770 420 1360

powerinfo@digitalprojection.com www.digitalprojection.com

### **Digital Projection China**

中国 北京市 朝阳区 芍药居北里101号 世奥国际中心A座2006室(100029)

Rm A2006 ShaoYaoJu 101 North Lane Shi Ao International Center Chaoyang District Beijing 100029, PR CHINA

Tel (+86) 10 84888566 Fax (+86) 10 84888566-805

techsupport@dp-china.com.cn www.dp-china.com.cn

### **Digital Projection Asia**

16 New Industrial Road #02-10 Hudson Technocentre Singapore 536204

Tel (+65) 6284-1138 Fax (+65) 6284-1238

www.digitalprojectionasia.com

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Full information about operating, connecting and setting up the projector can be found in the User Manual, located on the CD.

# Symbols used in the User Manual



LASER WARNING: this symbol indicates that there is a potential hazard of eye exposure to laser radiation 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.



Specifications are subject to change without notice.

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# **Electrical and physical specifications**

Main Voltage 100-240 VAC 50/60Hz single phase

Operating Temperature 0°C to 40°C (32 to 104F)
Storage Temperature -20°C to 60°C (-4 to 140F)
Operating Humidity 10% to 85% non-condensing
Weight 25 kg (55.1 lb) without lens

Power Consumption 650 W
Thermal Dissipation 2219 BTU/hr

### Laser precautions



### **CLASS 3R LASER PRODUCT**

This Laser Product is designated as Class 3R during all procedures of operation.

LASER LIGHT - AVOID DIRECT EYE EXPOSURE.

Do not point laser or allow laser light to be directed or reflected toward other people or reflective objects.

Direct or scattered light can be hazardous to eyes and skin.

There is a potential hazard of eye exposure to laser radiation if the included instructions are not followed.

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

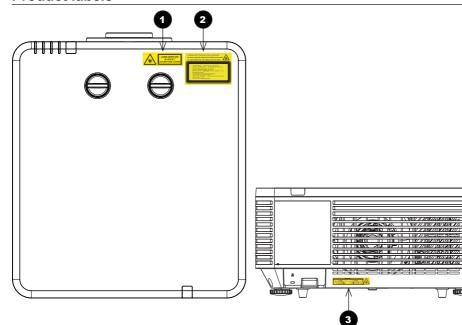
### Laser Parameters:

Wavelength 450nm - 460nm (Blue)
Mode of operation Pulsed, due to frame rate

Pulse width 1.34ms
Pulse repetition rate 120Hz
Maximum laser energy 0.698mJ
Total internal power >100W

Apparent source size >10mm, at lens stop Divergence >100 mili Radian

# **Product labels**











Hazard Warning Symbol and Aperture Label

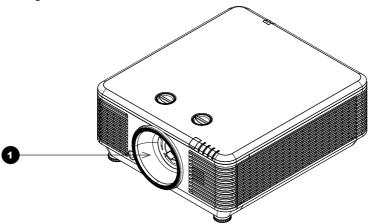
2 Explanatory Label

3 Explanatory Label

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# Location of laser aperture

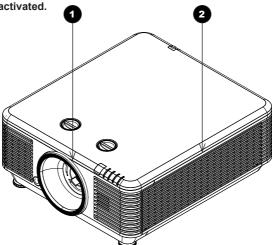
The laser aperture is located as indicated below. Be careful not to expose the eye to direct laser light.



1 Laser aperture

### Interlock switches

Three interlock switches installed at the main frame, inside the cover, will power-off the system individually when activated.



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

# **General precautions**



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.

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# Installation precautions



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

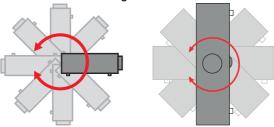
The projector must be installed only by suitably qualified personnel, in accordance with local building codes.

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

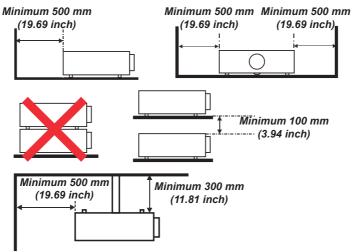
The power connection should be easily accessible, so that it can be disconnected in an emergency.



There is no limit on tilt angle.



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



For portrait installation, a customized stand is required to be attached to the projector. See Reference drawings for customized stand - portrait mode in the user manual.



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.

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

Do not drop or knock the projector.

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.

When stacking projectors, the stack MUST be vertical, to ensure that the stresses are distributed to all four chassis corners.

Do not stack more than 3 projectors.

Do not place heavy objects on top of the projector chassis. Only the chassis corners and the optional rigging frame are capable of withstanding the weight of another projector.

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

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.

Turn on Altitude Mode when located in high altitude areas.

The projector can only be installed upright or inverted.

When installing the bracket, make sure the weight limit is not exceed and the projector is firmly secured.

Avoid installing near an air conditioner duct or a subwoofer.

Avoid installing at high temperature, insufficient cooling and heavy dust locations.

Keep your product away from fluorescent lamps (>1 Meter) to avoid malfunction caused by IR interference.

The VGA IN connector should be connected to the VGA IN port. Note that it should be inserted tightly, with the screws on both sides securely fastened to ensure proper connection of the signal wire for achieving optimal display effect.

The AUDIO IN connector should be connected to the AUDIO IN port and CANNOT be connected to AUDIO OUT or other ports like BNC, RCA; otherwise, it will lead to mute output and even DAMAGE the port.

Install the projector above 200cm to avoid damage.

The power cord and signal cable should be connected before 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.

The projector generates a massive amount of heat during use. The internal fan dissipates the heat of the projector when shutting down, which could continue for a certain period. After the project enters STANDBY MODE, press the AC power button to turn off the projector and 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.

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

# 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 A 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 41 dB (A) 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.

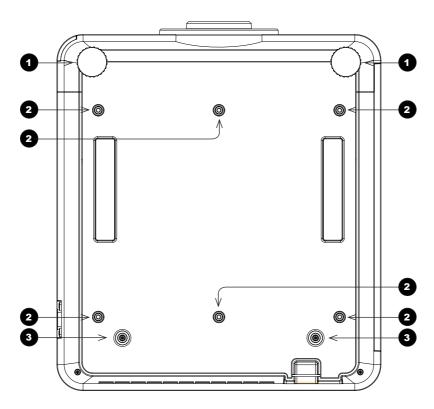
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# **Basic Operation Instructions**

### 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 below shows the positions of the feet for table mounting, and the fixing holes for ceiling mounting.



- 1 Two adjustable feet (front)
- Six M4 holes for ceiling mount The screws should not penetrate more than 15 mm into the body of the projector.
- Two fixed length feet (rear)

# Connecting the power supply

Firmly push the mains connector into the socket as shown in the illustration



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.

00000



- Connect the power cable between the mains supply and the projector. (See Connecting the power supply above.) Switch on at the switch next to the power connector.
- The **POWER** indicator lights red to signal that the projector is in STANDBY mode. Press one of the following buttons:
  - On the remote control, the ON button
  - On the projector control panel, the **POWER** button (1).

The **POWER** indicator begins flashing green. In approximately 30 seconds, the startup screen appears and the projector is fully switched on.

The first time you use the projector, you can set OSD language from the quick menu. (See **Setting the OSD language** in the user manual.)

# Switching the projector off

- Press OFF on the remote control or POWER () on the control panel, then press again to confirm your choice.
- 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.

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### Selecting an input signal

If more than one input source is connected, select the input you want to display. Press the **Source** button on the control panel and use the **UP** ▲ and **DOWN** ▼ arrow buttons to scroll through the list of inputs:

- HDMI 1
- HDMI 2/ MHL
- DVI
- VGA 1: analog RGB DVD input YCbCr / YPbPr. or HDTV input YPbPr via D-sub connector
- BNC: analog RGB
- Composite Video
- HDBaseT

### Selecting a test pattern

- 1. Press the **MENU** button to open the OSD.
- 2. Press the **LEFT** ◀ and **RIGHT** ▶ arrow buttons to navigate to the **Settings 1** menu.
- 3. Press the UP ▲ and DOWN ▼ arrow buttons to move to the Advanced 2 submenu and then press ← (ENTER) to open the submenu. Once inside, press UP ▲ and DOWN ▼ to highlight Test Pattern.
- 4. Use the **LEFT** ◀ and **RIGHT** ▶ arrow buttons to cycle through the available test patterns.

# Adjusting the image

### Orientation

This can be set from the Setttings 1 menu.

Highlight Projection and choose from Normal, Rear, Ceiling and Rear+Ceiling.

### Keystone

To adjust keystone, press the **Keystone** button on the remote control to open the **Keystone** menu, and then use the arrow buttons for vertical or horizontal keystone corrections.

### **Picture**

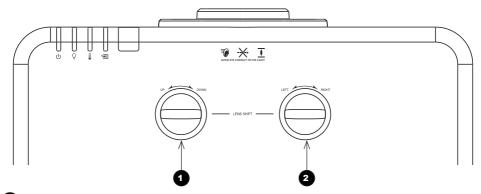
 Settings such as Gamma, Brightness, Contrast and Sharpness can be set from the Image menu.

# Adjusting the lens

### Lens shift

The lens shift function can be used to adjust the position of the projected image either horizontally or vertically.

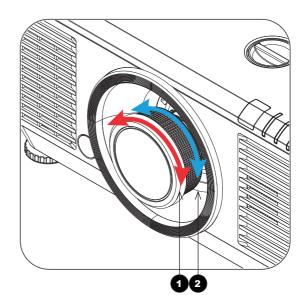
Use the vertical and horizontal lens shift knobs to move the image across the width or height of the screen.



- 1 Vertical lens shift knob
- 2 Horizontal lens shift knob

### Focus and zoom

Use the **focus** 1 and **zoom** 2 rings on the projector lens to adjust focus and zoom.



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# Inserting a new lens



Before changing the lens, always make sure the projector is switched off and fully disconnected from its power supply.



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



The lens is shipped separately.

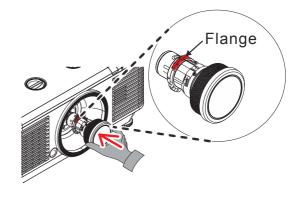


Take care to preserve the original lens packaging and protective caps for future use.

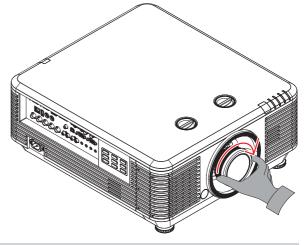


The projector will not power on without the lens fitted.

1. Align the flange and position it correctly at an 11 o'clock angle as shown in the illustration, then firmly push the lens into the socket



2. Turn the lens clockwise until it clicks into place.



# Removing the lens



Before changing the lens, always make sure the projector is switched off and fully disconnected from its power supply.



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



The lens is shipped separately.

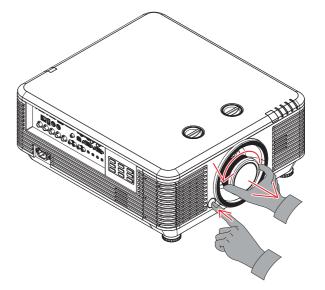


Take care to preserve the original lens packaging and protective caps for future use.



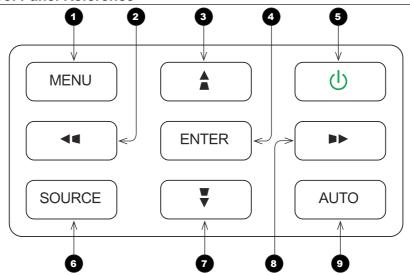
The projector will not power on without the lens fitted.

- Push in the lens release button. 1. and turn the lens anti-clockwise. 2. Slowly pull the lens out of the
- socket.



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# **Control Panel Reference**



- MENU
  - Opens and exits OSD menus.

Navigates and changes settings in the OSD. Adjusts **Horizontal Keystone**.

3 Keystone UP ▲

Navigates and changes settings in the OSD. Adjusts **Vertical Keystone**.

ENTER

Enters and confirms settings in the OSD.

POWER

Turns the projector on and off.

6 SOURCE

Opens the Source menu.

Keystone DOWN ▼

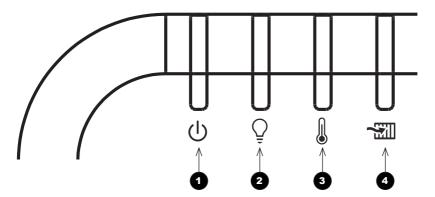
Navigates and changes settings in the OSD. Adjusts **Vertical Keystone**.

8 Keystone RIGHT ▶►

Navigates and changes settings in the OSD. Adjusts **Horizontal Keystone**.

AUTO
 Optimizes image size, position and resolution.

# **Projector indicators**

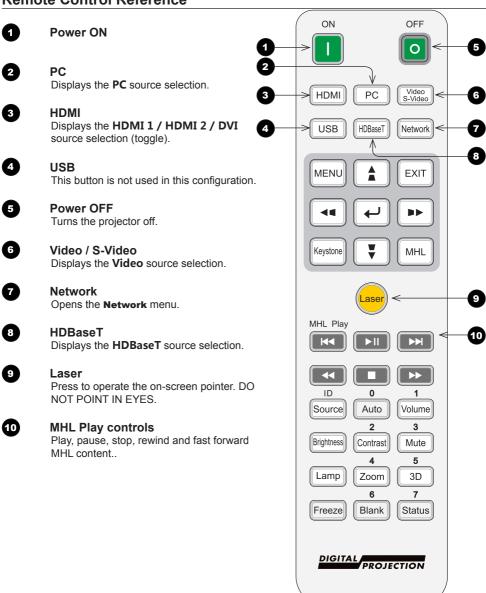


- Power LED
  Displays power on/off sequence status.
- Light source LED
  Displays light source status.
- Temp LED
  Displays thermal status.
- Filter LED

  Displays filter replacing warning message.

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### **Remote Control Reference**



### Remote Control reference continued...

11 Keystone UP

Navigates and changes settings in the OSD.

Adjusts Vertical Keystone.

MENU Opens the OSD.

13 Keystone LEFT ◀■

Navigates and changes settings in the OSD.

Adjusts Horizontal Keystone.

14 Keystone

Selects the HDBaseT input. Use with **ALT** to switch the green DMD on and off. This functionality is disabled when the projector is showing a test pattern.

15 Keystone DOWN ▼

Navigates and changes settings in the OSD.

Adjusts **Vertical Keystone**.

16 EXIT

Returns to the previous OSD page.

Keystone RIGHT ▶▶

Navigates and changes settings in the OSD.

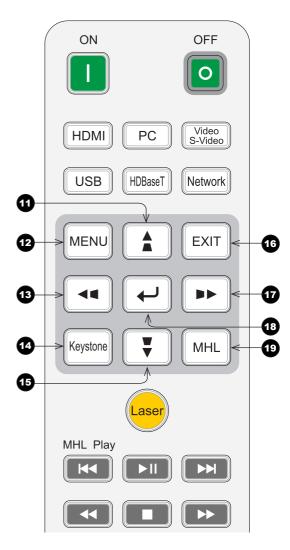
Adjusts Horizontal Keystone.

18 ENTER

Enters and confirms settings in the OSD.

**19** MHL

Enables the Mobile High-Definition Link technology feature for smart devices.



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### Remote Control reference continued...

Auto / ID input 0

Automatically adjusts frequency, phase and position. Use with **Source / ID** to set the remote ID to **0** 

Source / ID

Selects the next input source.
Press with a number key to set a remote control ID.

22 Brightness

Displays the Brightness slider.

Zoom / ID input 4

Displays the zoom control.

Use with **Source / ID** to set the remote ID to **4**.

24 Lamp

Shows the light source selections.

25 Freeze

Freezes / unfreezes the current frame

26 Blank / ID input 6

Blanks out the screen. Use with **Source / ID** to set the remote ID to **6**.

Volume / ID input 1

Displays the **Volume** slider.
Use with **Source / ID** to set the remote ID to **1** 

28 Contrast / ID input 2

Displays the **Contrast** slider.

Use with Source / ID to set the remote ID to 2.

Mute / ID input 3

Mutes the built-in speaker.

Use with Source / ID to set the remote ID to 3.

3D / ID input 5

Opens the 3D Settings menu.

Use with Source / ID to set the remote ID to 5.

31 Status / ID input 7

Opens the Status menu (only if an input source is detected).

Use with Source / ID to set the remote ID to 7.

