

DIGITAL 
PROJECTION

USER MANUAL

INSTALLATION AND QUICK-START GUIDE

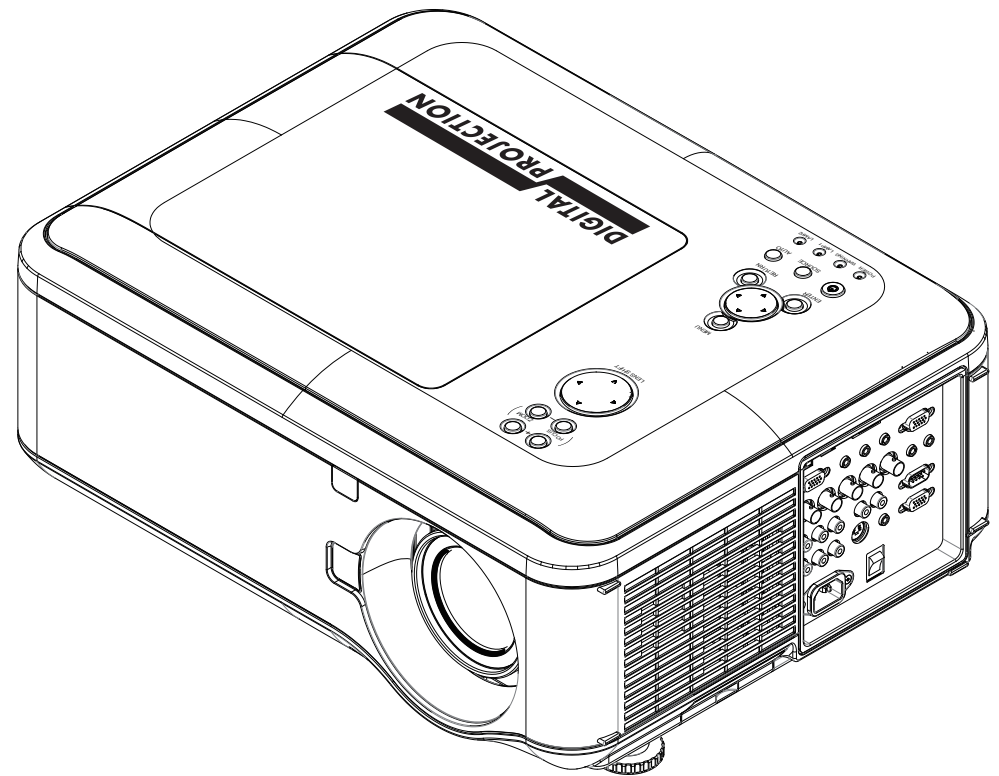
CONNECTION GUIDE

OPERATING GUIDE

REMOTE COMMUNICATIONS GUIDE

E-Vision 6000 Series

High Brightness Digital Video Projector



About This Document

Please follow the instructions in this manual carefully to ensure safe and long-lasting use of the projector.

Keep this manual handy for future reference.

Symbols used in this manual

Many pages in this document have a dedicated area for notes. The information in that area is accompanied by the following symbols:



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.

Product revision

Because we at Digital Projection continually strive to improve our products, we may change specifications and designs, and add new features without prior notice.

Legal notice

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Notes

Introduction

Congratulations on your purchase of this Digital Projection product.


Your projector has the following key features:


- Swappable color wheels for high brightness and color critical applications.
- BrilliantColor™ for increased system brightness.
- DynamicBlack™ for improved black levels in dark scenes.
- Vertical and horizontal keystone correction.
- Control via LAN and RS232.
- Motorized lens mount.

A serial number is located on the back of the projector. Please record it here:

Notes

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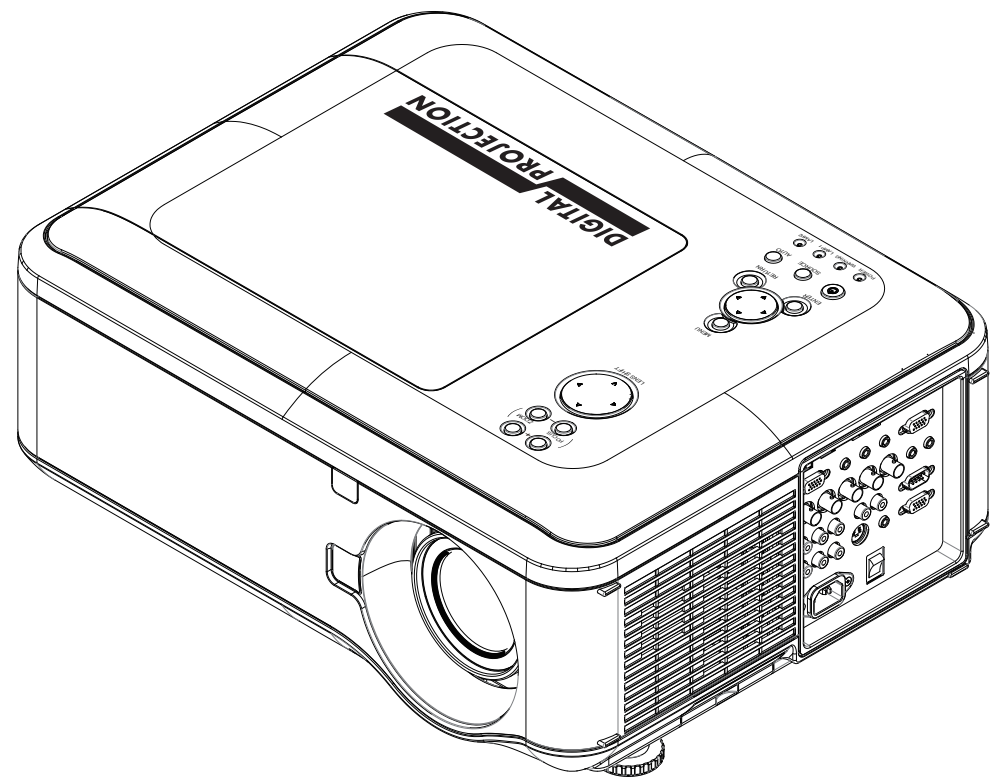
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INSTALLATION AND QUICK-START GUIDE

E-Vision 6000 Series

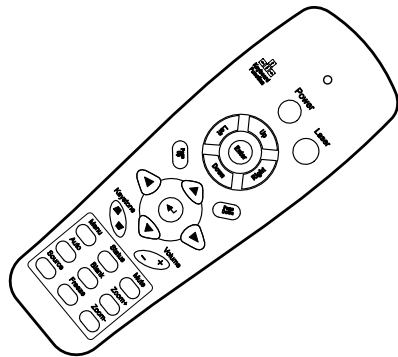
High Brightness Digital Video Projector



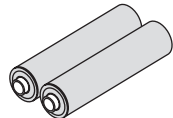
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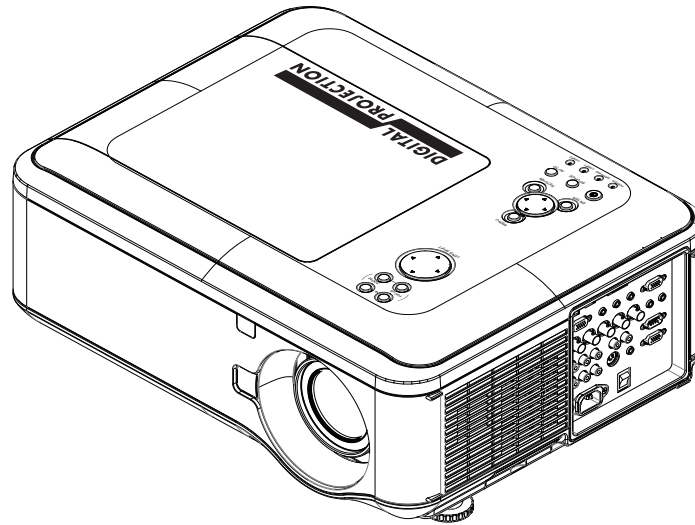
What's In The Box?



**Remote control
(110-385)**



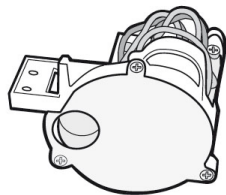
2 x AAA batteries



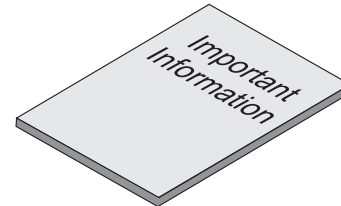
Projector



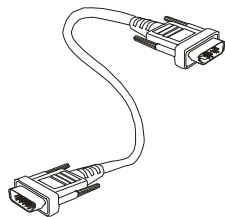
Lens cap



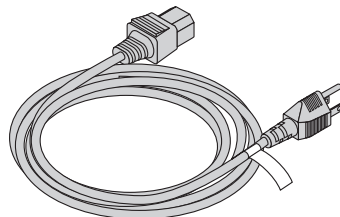
Six-segment color wheel



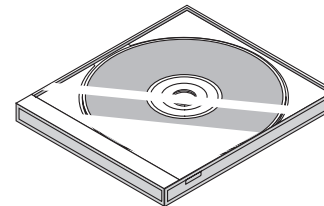
**Important Information
(113-380)**



VGA cable








Power cable



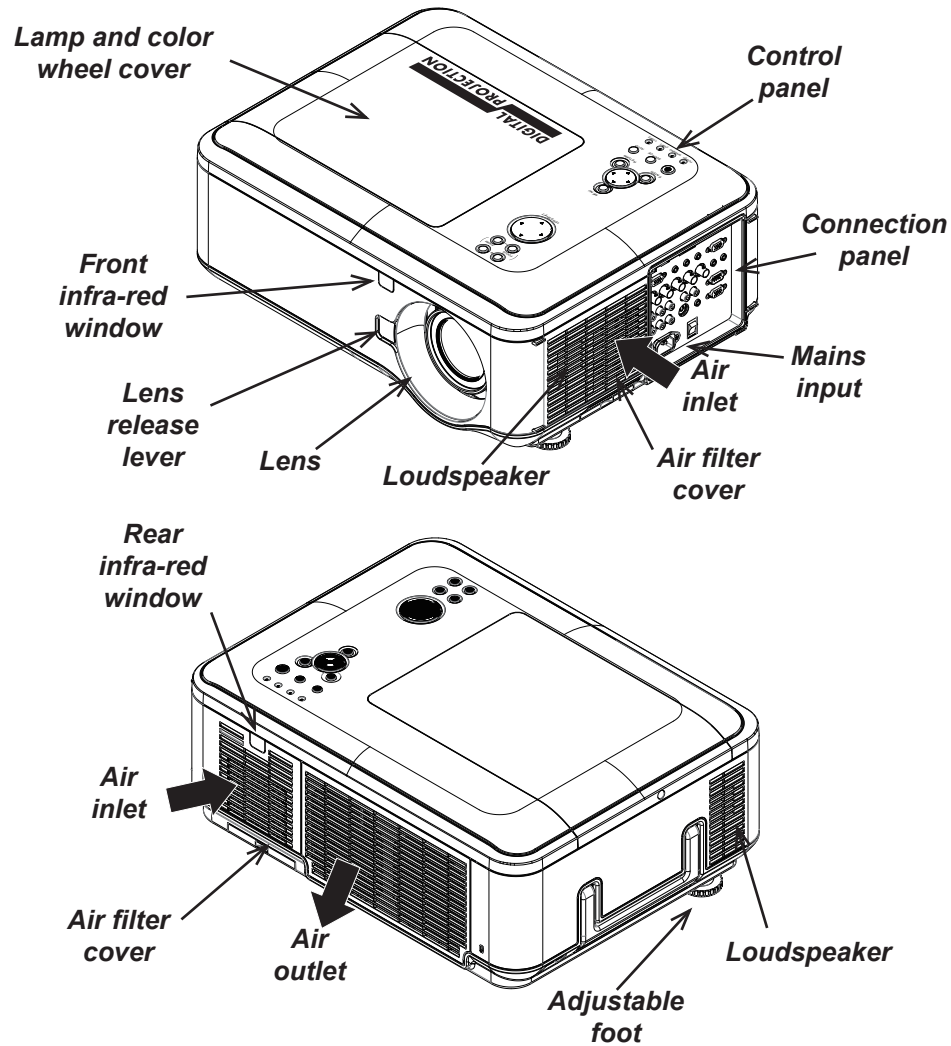
User Manual on disc (115-759)

Notes

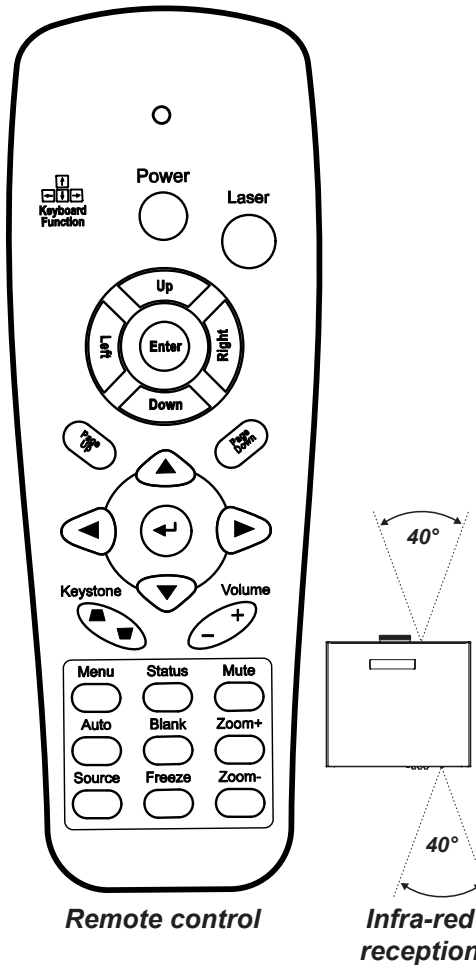
-  Make sure your box contains everything listed. If any pieces are missing, contact your dealer.
-  You should save the original box and packing materials, in case you ever need to ship your projector.
-  The projector is shipped without a lens.
-  A four-segment color wheel, optimized for brightness, is fitted as standard. Use the six-segment color wheel for optimized color.
-  The power cable supplied will be appropriate to the shipping destination.

Getting To Know The Projector

Front, side and rear views



Remote control



Notes

For full details of how to use the controls and the menu system, see the **Operating Guide**.





The upper wheel and the **PAGE UP / PAGE DOWN** buttons do not perform any function on this projector.

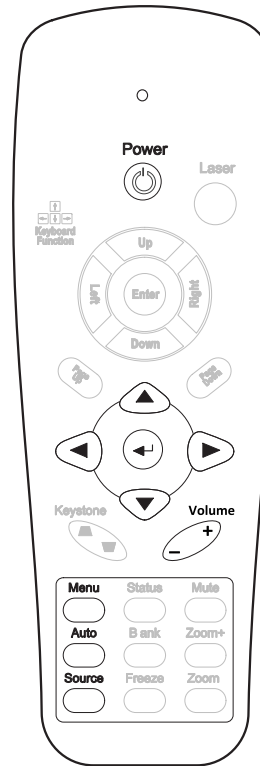
The remote will function well within a radius of about 7 meters (23 feet) and 15 degrees above or below the projector level.

Control panel and remote control

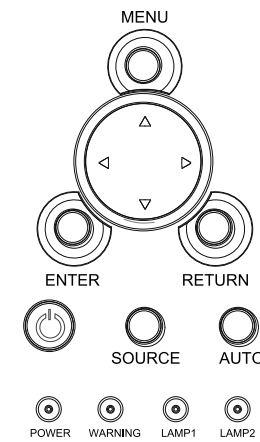
Some of the controls from the remote control are duplicated on the projector control panel, as shown on the right.

The following buttons are identical:

- **POWER** on the remote control and  on the control panel.
-  on the remote control and **ENTER** on the control panel.
- **SOURCE** and **AUTO** on both devices.
- **VOLUME + / VOLUME -** on the remote control and the **LEFT**  and **RIGHT**  arrow buttons on the control panel.




Remote control

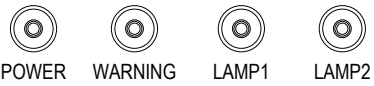


Control panel

Notes




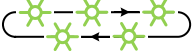

 For full details of how to use the controls and the menu system, see the **Operating Guide**.

Control panel indicators




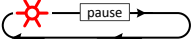
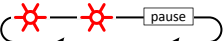
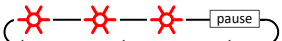
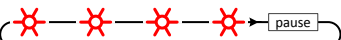



The Power indicator

The **Power** indicator will show amber when in standby and green when the projector is on, and will flash when the projector is warming up or cooling down.

Condition	Power indicator behaviour
Power off	Off 
Standby	On (amber) 
Cooling	Flashing (amber) 
Warming up	Flashing (green) 
Power on (Normal)	On (green) 

The Warning indicator


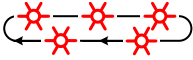
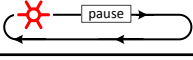
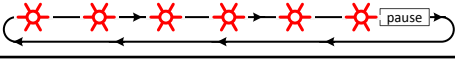
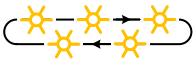




The **Warning** indicator will switch on or flash in different patterns to show different error situations.

Condition	Warning indicator behaviour
Projector working normally	Off 
Cover error	Flash and pause (red) 
Temperature error	Two flashes and pause (red) 
Power error	Three flashes and pause (red) 
Fan error	Four flashes and pause (red) 
Key locked	On (amber) 
Standby, Power-saving	Off 
Standby, Normal	On (green) 

Notes

The Lamp indicators

The **Lamp** indicators will show which lamp is in use, and whether it is in Normal or Eco mode.

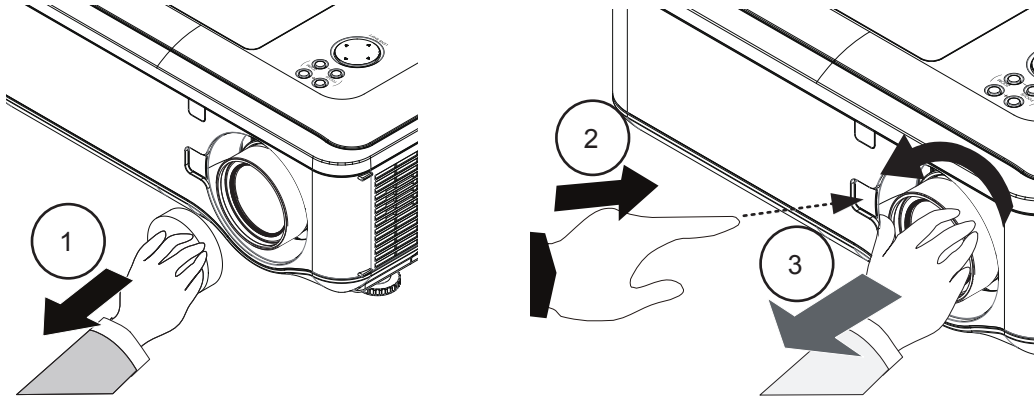
Condition	Lamp indicators behaviour
Lamp off	Off 
End of lamp life	Flashing (red) 
No lamp	Flash and pause (red) 
Lamp error	Six flashes and pause (red) 
Cooling lamp	Flashing (amber) 
Re-light up sequence	Flashing (green) 
Lamp life over	On (red) 
Eco mode	On (amber) 
Normal mode	On (green) 

Notes

Changing The Lens, Lamps And Color Wheel

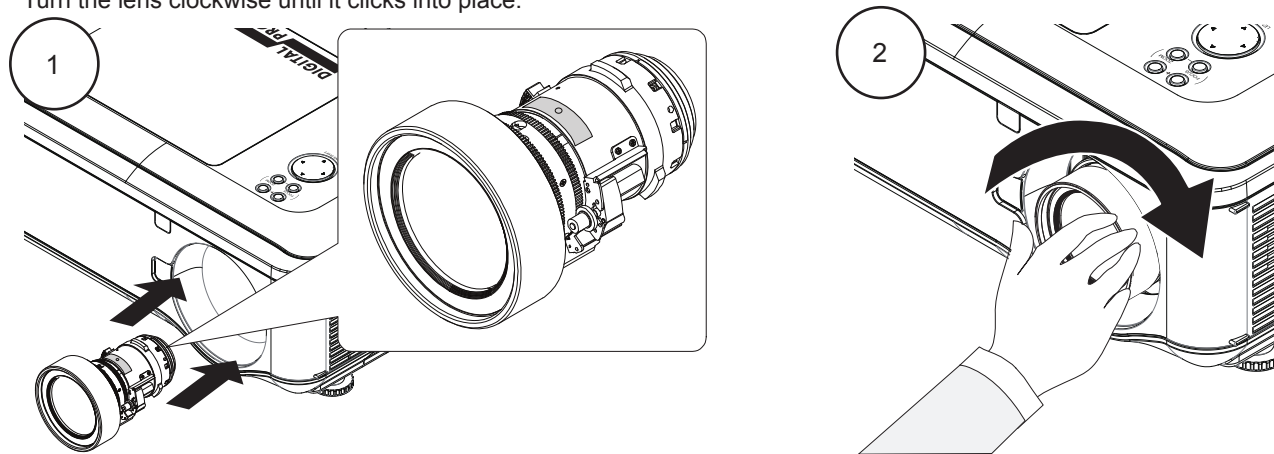
Removing the lens

1. Remove the lens cap.
2. Push in the lens release lever, and turn the lens anti-clockwise.
3. Remove the lens.



Fitting the lens

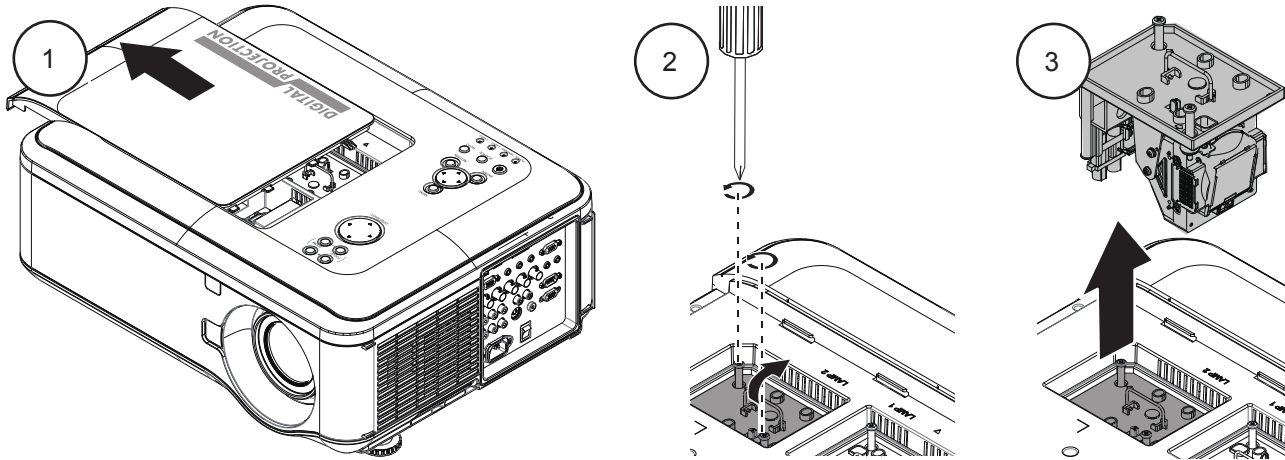
1. Position the lens so that the label marked 'O' is at the top, and gently insert it all the way into the lens mount.
2. Turn the lens clockwise until it clicks into place.



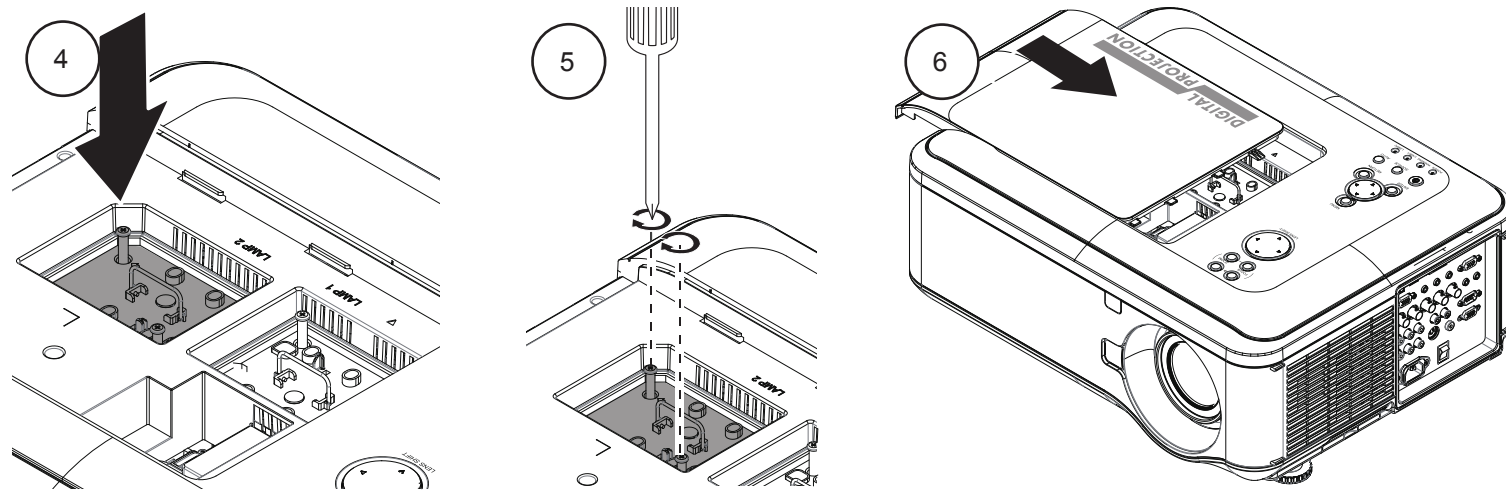
Notes

Changing the lamp


1. Slide open the lamp compartment cover as shown in the picture.
2. Unscrew the two captive screws securing the lamp module.
3. Pull firmly upwards on the handle to remove the lamp module.



4. Insert a new lamp module.
5. Fasten the screws.
6. Replace the lamp compartment cover.

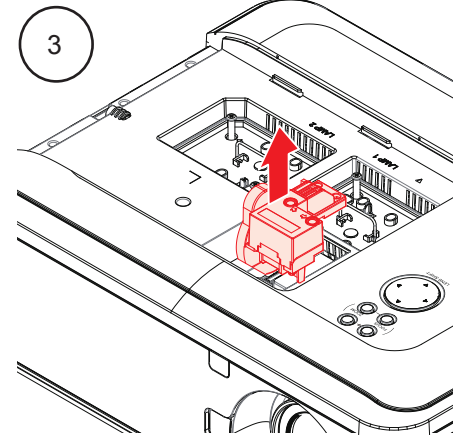
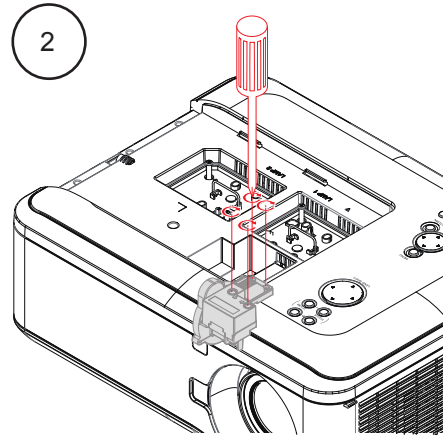
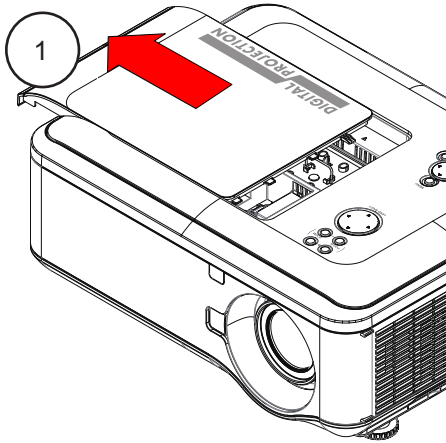


Notes

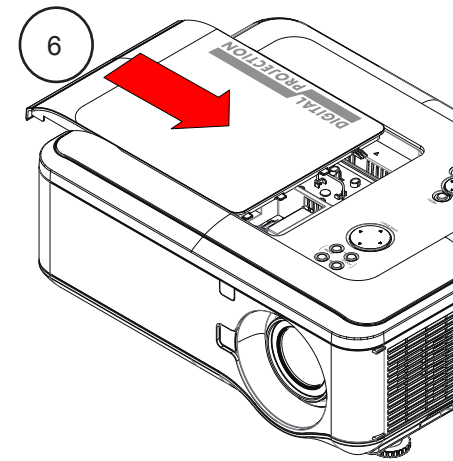
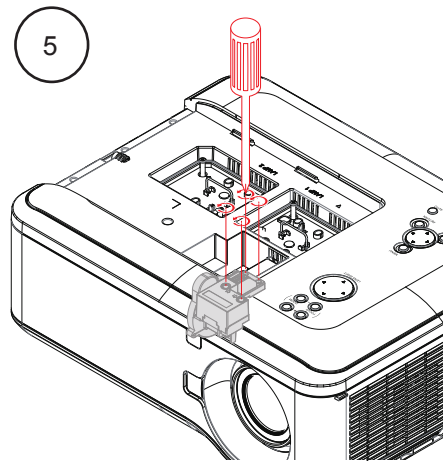
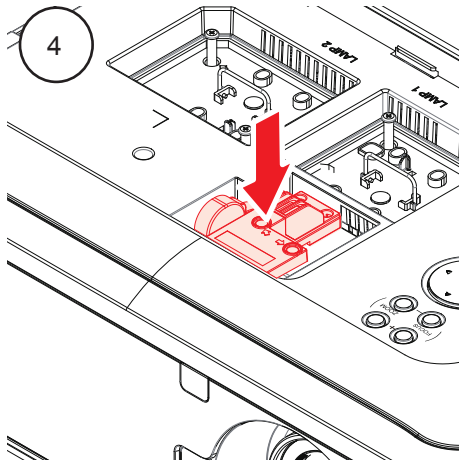
 The lamp and color wheel must be changed only by suitably qualified personnel.


Changing the color wheel


1. Slide open the lamp compartment cover as shown in the picture.
2. Unscrew the four captive screws securing the color wheel.
3. Remove the color wheel.




4. Insert a new color wheel.
5. Fasten the screws.
6. Replace the lamp compartment cover.

**Notes**

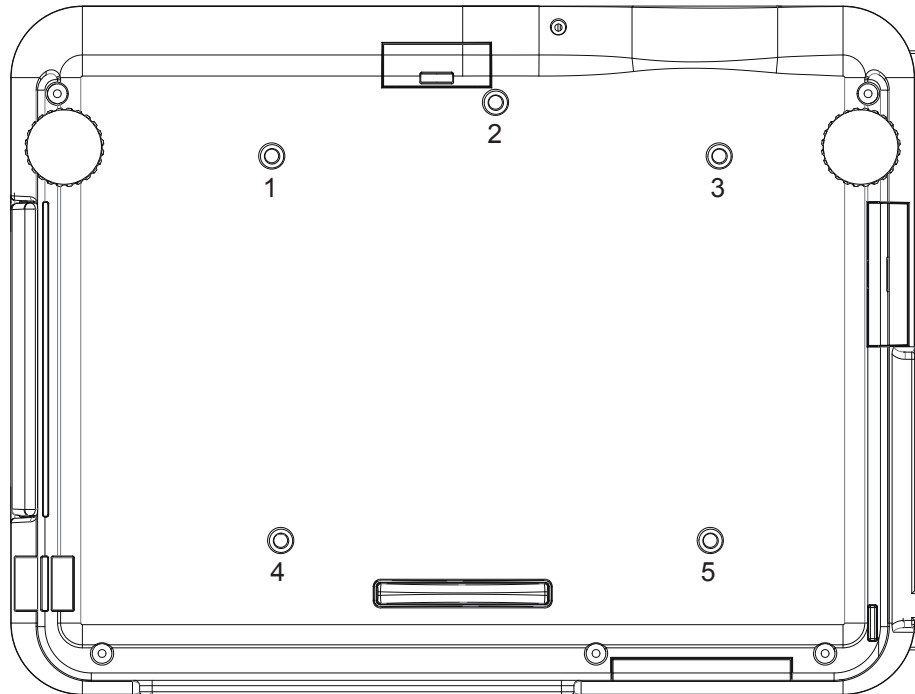
 A four-segment color wheel, optimized for brightness, is fitted as standard. Use the six-segment color wheel for optimized color.

 Keep the unused color wheel in the zipper bag in which the six-segment color wheel was packaged. The bag prevents dust from falling or collecting on the color wheel.

 The lamp and color wheel must be changed only by suitably qualified personnel.

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.
Alternatively, five M4 bolts (max length 12 mm [0.5 in]) can be used to attach the projector to a ceiling mount (optional accessory).



Location of the ceiling mount holes at the bottom of the projector

Notes



Ensure that there is at least 50 cm (20 in) of space between the ventilation outlets and any wall, and 10 cm (4 in) on all other sides.

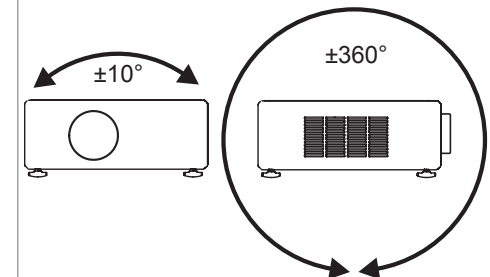
If ceiling mounting, ensure there is 30 cm (12 in) of space between the projector and ceiling.



Do not stack the projectors.



Do not tilt the projector more than $\pm 10^\circ$ from side to side when in use, as this may cause serious lamp failure, damage the lamp module and cause extra cost on replacement.



For details on setting up image and screen options, see **Operating the Projector** later in this Guide.

Operating The Projector

Switching the projector on

1. Connect the power cable between the mains supply and the projector. Switch on at the switch next to the power connector.

The **Power** indicator on the projector control panel will show amber and the **Warning** indicator will show green. The lamp will be off and the projector will be in **STANDBY** mode.

2. Press the **POWER** button on the control panel or on the remote control. The **Power** indicator on the control panel will flash green for a few seconds whilst the lamp comes up to full brightness. When the projector is ready for use, the **Power** indicator will show steady green.
3. Select the default language.

Selecting an input signal

Connect an input source to the projector. The signal should be automatically detected by the projector, and should be displayed within two or three seconds.

If more than one signal is connected, then select the input you want to display:

1. On either the control panel or remote, press **MENU**.
2. From the list of available menus, select **INPUT**.
3. Use the **UP**  and **DOWN**  arrow buttons to navigate, then **ENTER** to select the input you wish to display. Press **MENU** to exit.

Notes



*The language selection screen only appears the first time you power on the projector. For information about changing the default language at a later stage, see the **Operating Guide**.*





*For full details of how to connect an input source to the projector, see the **Connection Guide**.*





*For full details of how to use the controls and the menu system, see the **Operating Guide**.*

Adjusting the lens









Zoom

- Use the **ZOOM +/-** buttons on the control panel to adjust the lens so that the image fills the screen.
- Or on the remote control:
 1. Press **MENU** and from the list of options that appears on the screen, select **SETTING**.
 2. On the **BASIC** tab, select **ZOOM**, then use the **LEFT**  and **RIGHT**  arrow buttons to adjust the lens.

Focus

- Use the **FOCUS +/-** buttons on the control panel to adjust the lens until the image is sharp.
- Or on the remote control:
 1. Press **MENU** and from the list of options that appears on the screen, select **SETTING**.
 2. On the **BASIC** tab, select **FOCUS**, then use the **LEFT**  and **RIGHT**  arrow buttons to adjust the focus.

Shift

- Use the **LENS SHIFT** buttons **LEFT** , **RIGHT** , **UP**  and **DOWN**  on the control panel to adjust the position of the image,
- Or using the remote control:
 1. Press **MENU** and from the list of options that appears on the screen, select **SETTING**.
 2. On the **BASIC** tab, select **LENS SHIFT**, then use the arrow buttons **LEFT** , **RIGHT** , **UP**  and **DOWN**  to adjust the position of the image.

Notes

Adjusting the image

Orientation

1. Press **MENU** and from the list of options that appears on the screen, select **SETTING**.
2. On the **INSTALLATION** tab, open the **CEILING & REAR** setting, then select the desired image orientation. (Choose from **Desktop Front**, **Ceiling Rear**, **Desktop Rear** and **Ceiling Front**.)


Aspect Ratio

1. Press **MENU** and from the list of options that appears on the screen, select **ADJUST**.
2. On the **IMAGE OPTIONS** tab, open the **SCREEN** setting, then select the desired screen aspect ratio. (Choose from **4:3**, **16:9**, **16:10**, **Letterbox**, **True** and **Normal**.)

Picture

1. Press **MENU** and from the list of options that appears on the screen, select **ADJUST**.
2. On the **IMAGE** tab, access various picture settings, such as **Brightness** and **Contrast**.

Switching the projector off

1. Press  on the control panel or **STANDBY** on the remote control, then press the button a second time within 5 seconds to confirm your intention to switch off.
The lamp will switch off, and the **Power** indicator on the control panel will flash amber for a few seconds whilst the lamp cools. The **Power** indicator on the control panel will then show amber and the **Warning** indicator will show green. The projector will be in **Standby** mode.
2. Switch off at the switch next to the power connector. Disconnect the power cable from the projector.

Notes



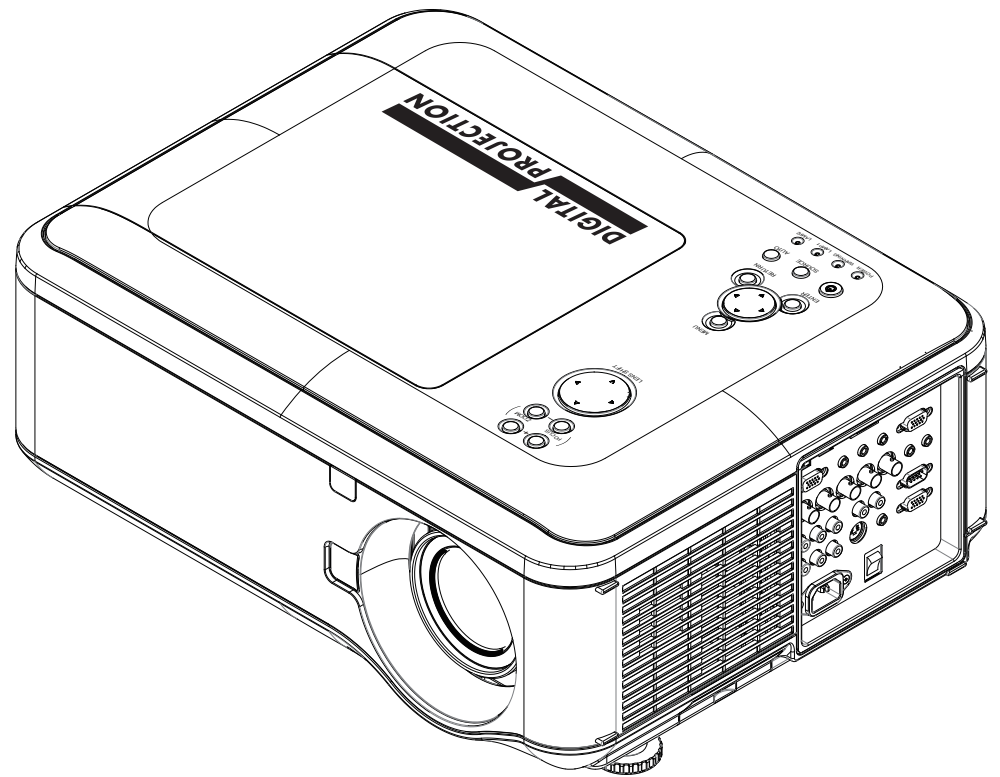
Always allow the lamp to cool for 5 minutes before:

- **disconnecting the power**
- **moving the projector**



DIGITAL **PROJECTION** **CONNECTION GUIDE**

E-Vision 6000 Series

High Brightness Digital Video Projector



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Signal Inputs and Outputs

Computer 1

- Connect an **analog computer (VGA)** cable to the 15-pin D-type.
- Connect a **stereo audio** cable to the 3.5mm jack.

Computer 2

- Connect a set of **RGB, RGBHV** or **YCrCb** cables to the BNC connectors.
- Connect a **stereo audio** cable to the 3.5mm jack.

Computer 3

- Connect a **DVI-D** cable to the DVI connector.
- Connect a **stereo audio** cable to the 3.5mm jack below the DVI connector.

Component

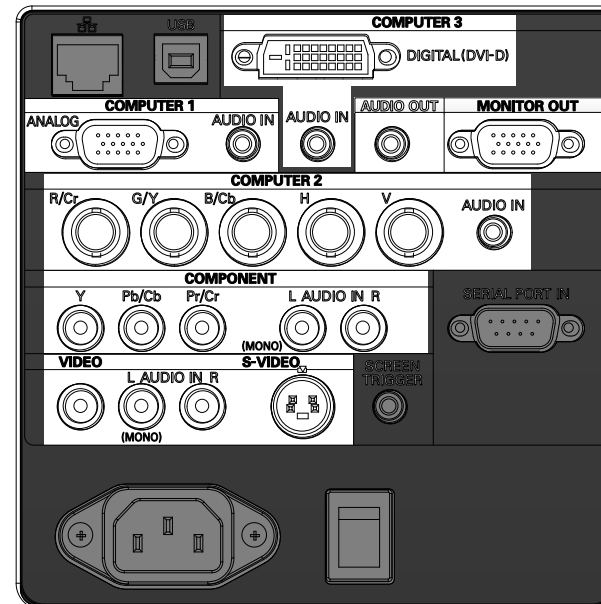
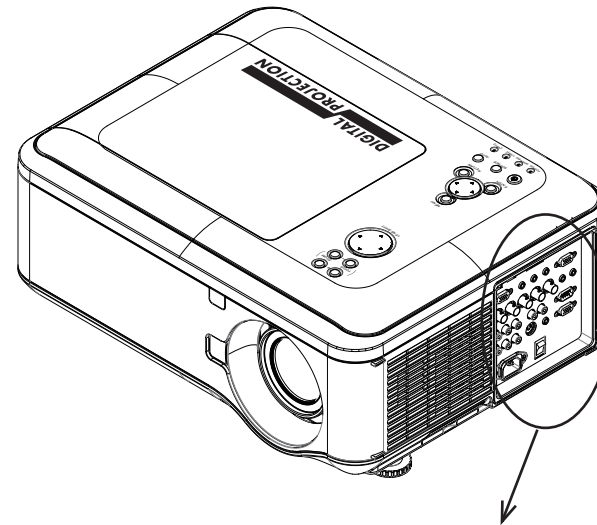
- Connect a set of **YPrPb** or **YCrCb** cables to the RCA phono connectors.
- Connect a pair of **audio cables** to the **L** and **R** audio connectors or a single audio cable to the **L** connector.

Video or S-Video

- Connect a **composite video** cable to the single RCA phono connector, or an **S-Video** cable to the 4-pin mini-DIN.
- Connect a pair of **audio cables** to the **L** and **R** audio connectors or a single audio cable to the **L** connector.

Monitor Out

- Connect an **analog monitor (VGA)** cable to the 15-pin D-type.
- Connect a **stereo audio** cable to the 3.5mm jack.



Connection Panel

Notes

- For a complete listing of pin configurations for all signal and control connectors, see **Wiring Details** later in this Guide.

- **Monitor Out** only displays the input from **Computer 1**.

Supported Signal Input Modes

Signal		Resolution	Refresh Rate (Hz)	Total number of lines	Horizontal Frequency (kHz)	VIDEO / S-VIDEO	COMPONENT	COMPUTER 1 (VGA)	COMPUTER 2 (RGB/YCrCb)	COMPUTER 3 (DVI-D)
SDTV	480i	720 x 480	59.94	525	15.73	✓	✓		✓	
	576i	720 x 576	50	625	15.63	✓	✓		✓	
HDTV	480p	720 x 480	59.94	525	31.47		✓		✓	✓
	576p	720 x 576	50	625	31.25		✓		✓	✓
	720p50	1280 x 720	50	750	37.50		✓		✓	✓
	720p60	1280 x 720	60	750	45.00		✓		✓	✓
	1080i50	1920 x 1080	50	1125	28.13		✓		✓	✓
	1080i60	1920 x 1080	60	1125	33.75		✓		✓	✓
	1080p50	1920 x 1080	50	1125	56.25				✓	✓
	1080p60	1920 x 1080	60	1125	67.5				✓	✓
COMPUTER	480p	640 x 480	59.9	526	31.5			✓	✓	✓
	VGA72	640 x 480	72.8	521	37.9			✓	✓	✓
	VGA75	640 x 480	75	500	37.5			✓	✓	✓
	VGA85	640 x 480	85	509	43.3			✓	✓	✓
	SVGA56	800 x 600	56.3	625	35.2			✓	✓	✓
	SVGA60	800 x 600	60.3	629	37.9			✓	✓	✓
	SVGA72	800 x 600	72.2	666	48.1			✓	✓	✓
	SVGA75	800 x 600	75	625	46.9			✓	✓	✓
	SVGA85	800 x 600	85.1	631	53.7			✓	✓	✓
	XGA60	1024 x 768	60	807	48.4			✓	✓	✓
	XGA70	1024 x 768	70.1	806	56.5			✓	✓	✓
	XGA75	1024 x 768	75	800	60			✓	✓	✓
	WXGA60	1280 x 720	59.9	746	44.7			✓	✓	✓
	WXGA60	1280 x 720	60	750	45			✓	✓	✓
	WXGA60	1280 x 768	59.9	798	47.8			✓	✓	✓
	WXGA60	1280 x 800	59.8	831	49.7			✓	✓	✓
	WXGA75	1280 x 800	74.9	838	62.8			✓	✓	✓
	WXGA60	1360 x 768	60	795	47.7			✓	✓	✓

continued on next page...

Notes

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Signal		Resolution	Refresh Rate (Hz)	Total number of lines	Horizontal Frequency (kHz)	VIDEO / S-VIDEO	COMPONENT	COMPUTER 1 (VGA)	COMPUTER 2 (RGB/YCrCb)	COMPUTER 3 (DVI-D)
COMPUTER <i>continued</i>	WXGA60	1366 x 768	59.8	799	47.8			✓	✓	✓
	WXGA+60	1440 x 900	59.9	933	55.9			✓	✓	✓
	SXGA75	1152 x 864	75	900	67.5			✓	✓	✓
	SXGA60	1280 x 960	60	1000	60			✓	✓	✓
	SXGA60	1280 x 1024	60	1067	64			✓	✓	✓
	SXGA75	1280 x 1024	75	1067	80			✓	✓	✓
	SXGA+60	1400 x 1050	60	1088	65.3			✓	✓	✓
	WSXGA+	1680 x 1050	60	1088	65.3			✓	✓	✓
	UXGA60	1600 x 1200	60	1250	75.00			✓	✓	✓
MAC	MAC13	640 x 480	66.6	526	35.0			✓	✓	✓
	MAC16	832 x 624	74.5	667	49.7			✓	✓	✓
	MAC19	1024 x 768	74.9	804	60.2			✓	✓	✓
	MAC21	1152 x 870	75.1	915	68.7			✓	✓	✓

Notes

Control Connections

Screen Trigger

- The Trigger output can be connected to an electrically operated screen, automatically deploying the screen when the projector is switched on, and retracting the screen when the projector is switched to standby.

USB

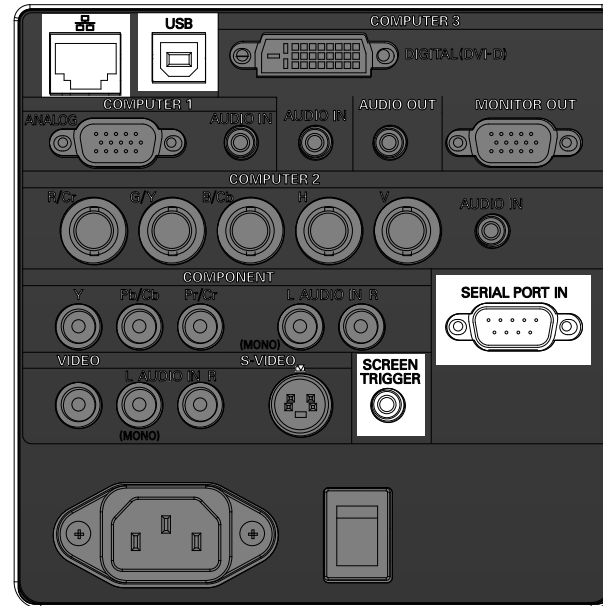
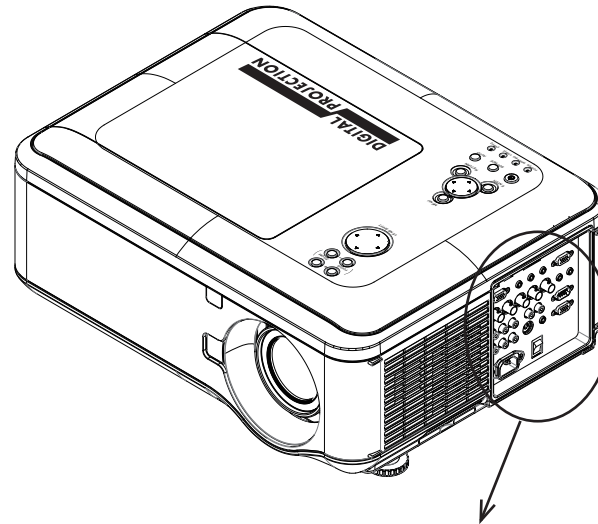
- The USB port is used to download firmware updates, issued from time to time by Digital Projection.

Serial Port

- The projector's features can be controlled via a serial connection, using the control strings described in the *Remote Communications Guide*.

LAN (Plink)

- The projector's features can be controlled via a LAN connection, using the industry standard *PJLink* commands. The PJLink specification can be downloaded from <http://pjlink.jbmia.or.jp/english> - click on the *Specifications* link.
- The LAN IP Address of the projector can be set by using the *Network* submenu, which can be found in the *Advanced Setting* submenu in the *Installation* menu.
- Once the LAN IP Address has been set, it is possible to assign a *Host Name* and *Domain Name* to the projector, and to set up an *Alert Mail* address and *PJLink* password.
- A number of basic picture and input settings can be controlled directly using the embedded *LAN Control utility*.



Connection Panel

Notes

- For a complete listing of pin configurations for all signal and control connectors, see *Wiring Details* later in this Guide.
- Only one remote connection can be used at any one time. For more information, see the *Installation menu* in the *Operating Guide*.
- When *Standby Mode* is set to **Power-saving**, the **LAN** connection is disabled.
- For more information about PJLink settings, see the *Remote Communications Guide*.
- For full details of how to use the **LAN Control Utility**, see the *Remote Communications Guide*.

Wiring Details

Signal inputs and outputs

Computer 1

Video input: analog computer (VGA)

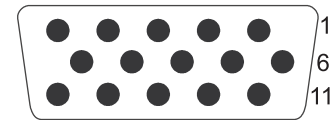
15 way D-type connector

1	R
2	G
3	B
4	unused
5	Digital Ground (H Sync)
6	R Ground
7	B Ground
8	G Ground
9	+5v
10	Digital Ground (V Sync/DDC)
11	unused
12	SDA
13	H Sync
14	V Sync
15	SCL

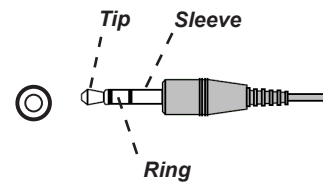
Audio input

3.5mm mini jack

Tip	Left
Ring	Right
Sleeve	Ground




Computer 1 video:
pin view of female connector



Computer 1 audio

Notes

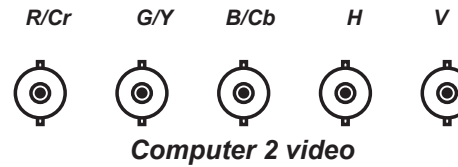
 For full details of all input settings, see the **Setting menu** in the **Operating Guide**.

Computer 2

Video input: RGBHV, RGsB or YCrCb

5 x 75 ohm BNC

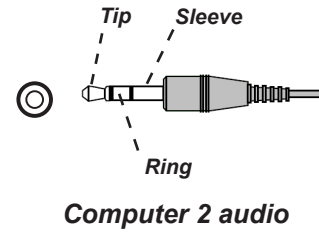
RGBHV	RGsB	YCrCb
Green	Green + Sync	Y
Blue	Blue	Cb
Red	Red	Cr
Hsync		
Vsync		



Audio input

3.5mm mini jack

Tip	Left
Ring	Right
Sleeve	Ground



Notes

For full details of all input settings, see the **Setting menu** in the **Operating Guide**.

Computer 3

Video input: DVI-D

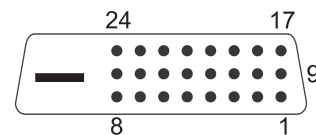
24 way D-type connector

- 1 TMDS Data 2-
- 2 TMDS Data 2+
- 3 TMDS Data 2 Shield
- 4 unused
- 5 unused
- 6 DDC Clock
- 7 DDC Data
- 8 unused
- 9 TMDS Data 1-
- 10 TMDS Data 1+
- 11 TMDS Data 1 Shield
- 12 unused
- 13 unused
- 14 +5 V Power
- 15 Ground
- 16 Hot Plug Detect*
- 17 TMDS Data 0-
- 18 TMDS Data 0+
- 19 TMDS Data 0 Shield
- 20 unused
- 21 unused
- 22 TMDS Clock Shield
- 23 TMDS Clock+
- 24 TMDS Clock-

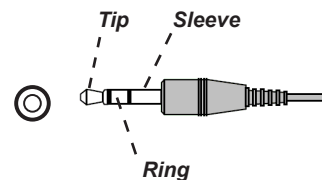
Audio input

3.5mm mini jack

- Tip Left
- Ring Right
- Sleeve Ground



Computer 3 video:
pin view of female connector



Computer 3 audio

Notes

- High Definition Content Protection (HDCP) is supported on this input.
- For full details of all input settings, see the **Setting menu** in the **Operating Guide**.

Component

Video input

3 x RCA Phono

YCrCb YPrPb

Cr Pr

Y Y

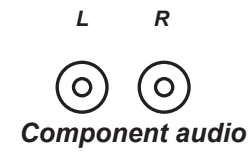
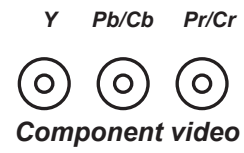
Cb Pb

Audio


2 x RCA Phono

Left or Mono audio

Right audio



Notes

 For full details of all input settings, see the **Setting menu** in the **Operating Guide**.

Video and S-Video

Video input

1 x RCA Phono

Composite Video



Video

S-Video input

4 pin mini-DIN

1 Y Ground

2 C Ground

3 Luminance (Y)

4 Chrominance (C)



S-Video:

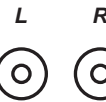
pin view of female connector

Shared audio input for Video and S-Video

2 x RCA Phono

Left or Mono audio

Right audio



**Video and S-Video:
shared audio input**

Notes



For full details of all input settings, see the **Advanced menu** in the **Operating Guide**.

Monitor Out

Video output: analog computer (VGA)

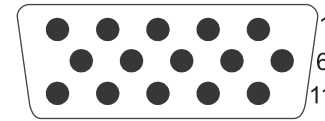
15 way D-type connector

1	R
2	G
3	B
4	unused
5	Digital Ground (H Sync)
6	R Ground
7	B Ground
8	G Ground
9	+5v
10	Digital Ground (V Sync/DDC)
11	unused
12	SDA
13	H Sync
14	V Sync
15	SCL

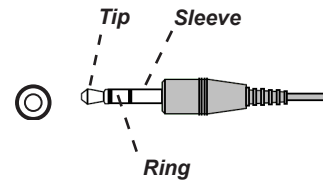
Audio output

3.5mm mini jack

Tip	Left
Ring	Right
Sleeve	Ground





**Monitor Out video:
pin view of female connector**



Monitor Out audio

Notes

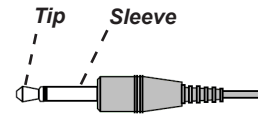
-  **Monitor Out** only displays the input from **Computer 1**.
-  For full details of all input settings, see the **Advanced menu** in the **Operating Guide**.

Control connections

Screen Trigger output

3.5mm mini jack

Tip Signal
Sleeve Ground

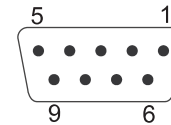


Screen Trigger

Serial Port

9 way D-type connector

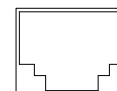
1 unused
2 Received Data (RX)
3 Transmitted Data (TX)
4 unused
5 Signal Ground
6 unused
7 unused
8 unused
9 unused



Serial Port:
pin view of female connector


LAN connection (RJ45)


RJ45 socket



LAN connection

Notes

 Only one remote connection can be used at any one time. For more information, see the **Installation** menu in the **Operating Guide**.

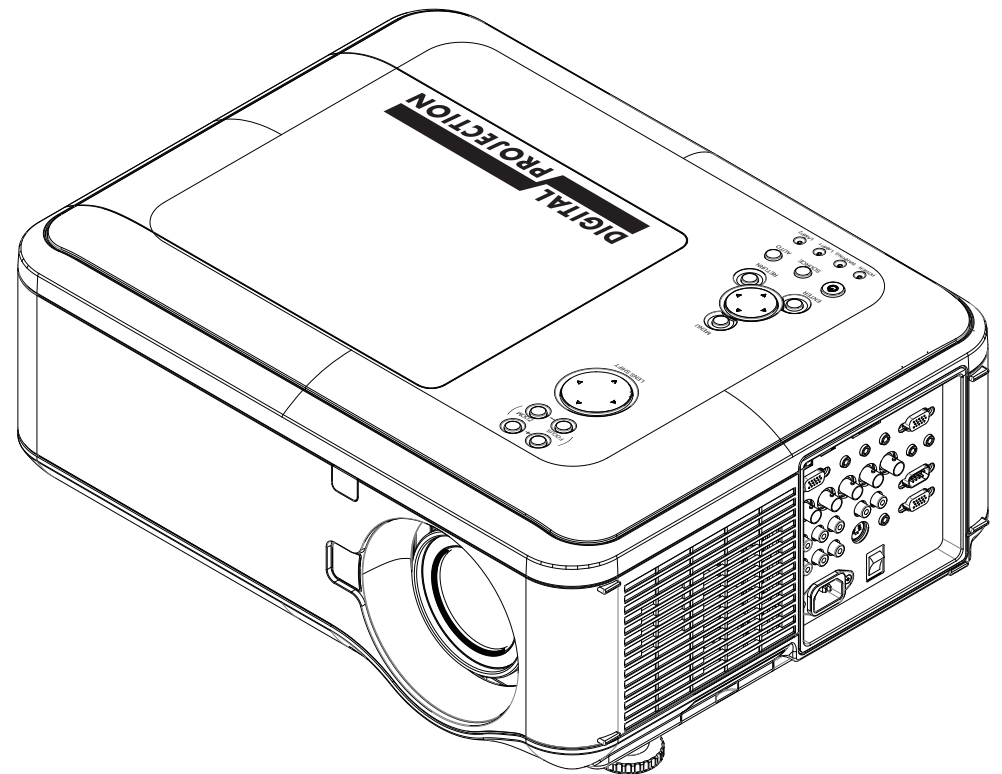
 For information about how to set the LAN IP configuration, see the **Operating Guide**.

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DIGITAL  **PROJECTION**
OPERATING GUIDE

E-Vision 6000 Series

High Brightness Digital Video Projector

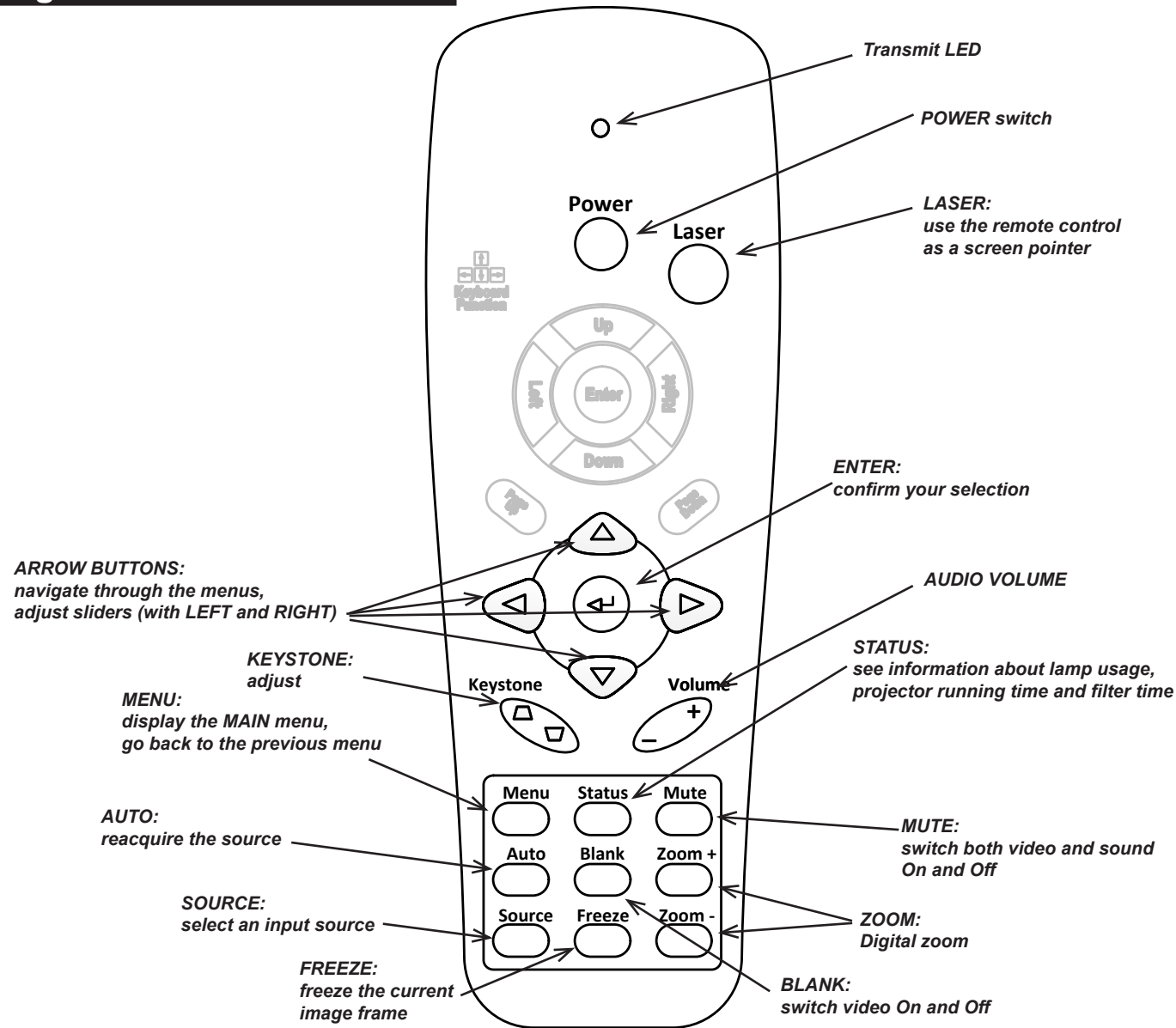


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Using The Remote Control



Notes



- Some options and controls may not be available due to settings in the menus.
- For full details of how to use the menu system, see later in this guide.
- Direct exposure to the laser beam may damage the eye.**
- The grayed out buttons have no function on this projector.

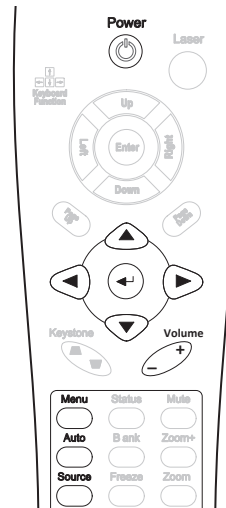
Using The Menu

Opening the menus

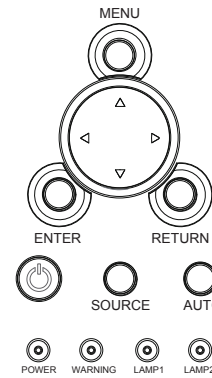
Access the various menus using either the projector control panel or the remote control. On either device,

- press the **MENU** button.

A page opens on the screen showing a list of available menus. Use the **UP**  and **DOWN**  arrows to navigate through the list and press **ENTER** to open a menu.



Remote control

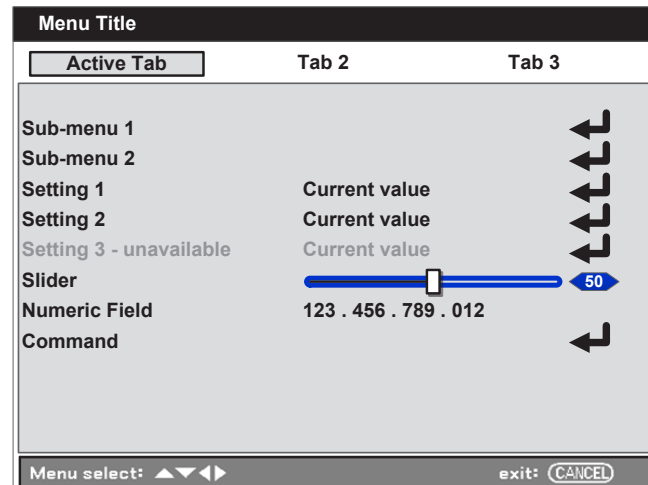


Projector control panel


Inside a menu

When you open a menu, the page consists of the following elements:

- Title bar at the top**
Shows which menu (and sub-menu) you have accessed.
- Tabs and page**
The active tab is highlighted. When you move to a different tab, a different page opens below.
- Items on the page**
These can be sub-menus, settings, sliders, numeric fields or commands.
- Available and unavailable items**
Unavailable items appear grayed out. Whether an item is available may depend on other settings.






Notes



 Some menu options and controls may not be available due to settings in other menus. These will be shaded gray on the actual menu.

Navigating the menus

When you open a page with tabs, you can do the following:

- move from tab to tab using the **LEFT**  and **RIGHT**  arrows.
- return to the previous level by pressing **MENU** or **RETURN**.
- navigate from the tabs to the page using the down  arrow.

Within a menu page you can do the following:

- navigate within the page using the **UP**  and **DOWN**  arrows.
- move back to the tabs by pressing **MENU** or **RETURN**.





Accessing sub-menus

Some menu items are sub-menus. They open new pages which in turn contain menu items. To access a sub-menu,

- navigate within the page using the **UP**  and **DOWN**  arrows until the sub-menu is highlighted, and press **ENTER**.

Editing settings

Each setting contains a list of values to choose from. You can change the value in two different ways.

- Navigate to the menu item and press the **LEFT**  or **RIGHT**  arrow.
- Alternatively, you can view the list and choose a value:
 1. Navigate to the menu item and press **ENTER**.
 2. In the pop-up list that opens, use the **UP**  and **DOWN**  arrows to highlight an item, and press **ENTER** again to apply the change and close the pop-up list.

Notes



Some menu options and controls may not be available due to settings in other menus. These will be shaded gray on the actual menu.

Changing slider values

1. Navigate to the menu item and press the **LEFT** ◀ or **RIGHT** ▶ arrow to adjust the value.
2. When ready, press **MENU** or **RETURN** to exit the slider.

Executing commands

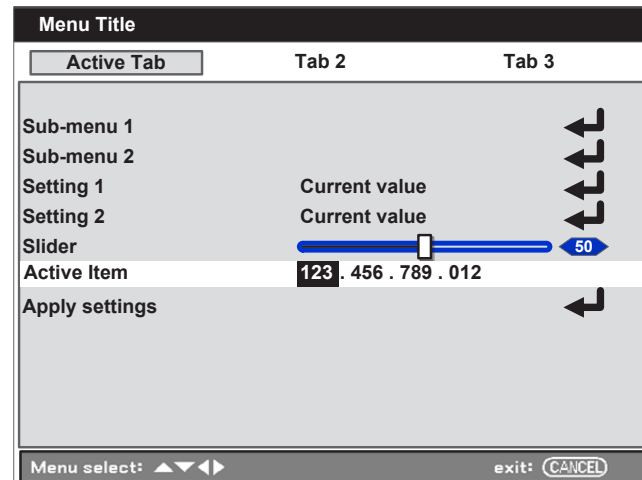
Select a command item and press **ENTER** to execute it.

In some cases you will see a confirmation message. Use the **LEFT** ◀ and **RIGHT** ▶ arrows to select **OK** or **RETURN**, and press **ENTER** again to confirm your choice.

Editing numeric fields

1. Navigate to the item containing the fields and press **ENTER** to access it.
2. Move from field to field within the line using the **LEFT** ◀ and **RIGHT** ▶ arrows.
3. Alter the value of a field by pressing the **UP** ▲ and **DOWN** ▼ arrows.

Once you have made your changes on the page, navigate to the **Apply Settings** command and press **ENTER** to execute it.



Notes





Some menu options and controls may not be available due to settings in other menus. These will be shaded gray on the actual menu.

A Tour Of The Menu

Main menu

The projector settings are grouped into six menus as shown in the illustration.

- **Input**
Set the input source.
- **Adjust**
Access image properties. The **Adjust** menu is divided in three sections: **Image**, **Image Options** and **Video**.
- **Volume**
Change the volume of the internal loudspeaker.
- **Setting**
Access various projector settings. The **Setting** menu is divided in three sections: **Basic**, **Installation** and **Option**.
- **Information**
View your current configuration.
- **Reset**
Restore the factory default settings.

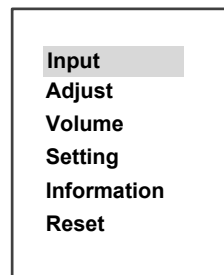
Use **UP**  and **DOWN**  to highlight a menu, and press **ENTER** to open the highlighted menu.

Input menu

This setting controls the input source used by the projector. Choose from the following input sources:

- Computer 1 (VGA)
- Computer 2 (RGBHV, RGsB or YCrCb)
- Computer 3 (DVI-D)
- Component
- Video
- S-Video

To set the input source, use **UP**  and **DOWN**  to select an input source, and press **ENTER**.



Notes



See also *Using the Menus*, earlier in this guide and *Menu Map*, later in this guide.



See the *Connection Guide* for further information about the available inputs and connections.

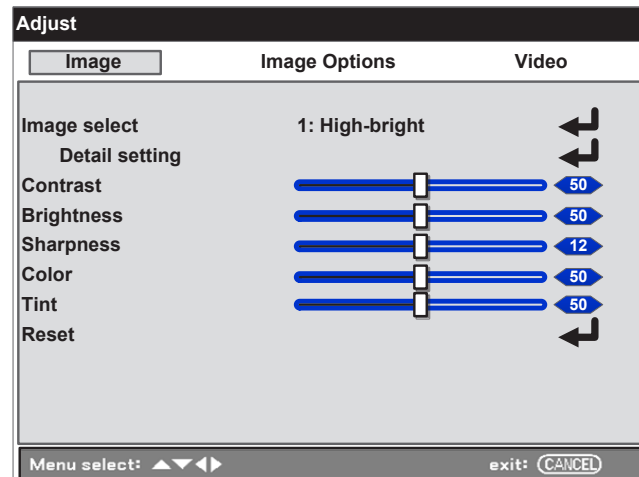
Adjust menu

The **Adjust** menu contains three tabs: **Image**, **Image Options** and **Video**.

Image


The **Image** tab is used to alter picture settings.


- **Image select**
Select one of the display modes as required.
- **Detail setting**
This sub-menu contains image adjustment options.
- **Contrast, Brightness, Sharpness, Color and Tint**
Set the sliders for these settings as required.
- **Reset**
Restore factory default settings.



Notes

Adjust menu Image tab

 See the next page for a full description of the **Detail setting** sub-menu. See also **Menu Map** later in this guide.

 The **Reset** command only affects settings on the **Image** tab.

Adjust menu continued...

Detail setting sub-menu

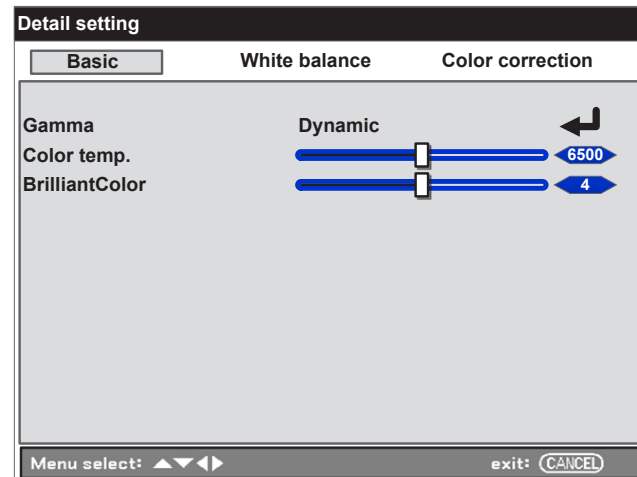
The **Detail setting** menu contains three tabs: **Basic**, **White balance**, and **Color correction**.

Basic tab

- **Gamma**
Choose from:
 - **Dynamic**
The gamma curve is adjusted automatically, depending on the image content.
 - **Natural**
Balanced shadow detail and black level.
 - **Black detail**
Increased shadow detail at the expense of elevated black levels.

Press **LEFT** ◀ or **RIGHT** ▶ to change the setting.

- **Color temp.**
Choose a value from 5000 (warmer) to 10500 (cooler).
- **BrilliantColor**
Allows for increased projector brightness at the expense of accurate color reproduction.



Notes

Adjust menu
Image tab
Detail setting sub-menu
Basic tab

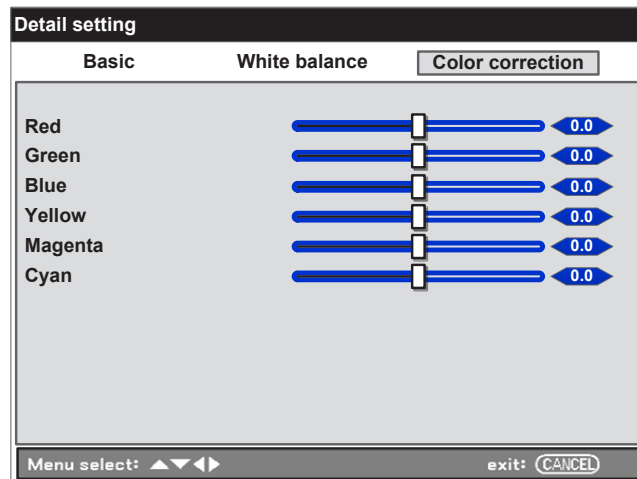
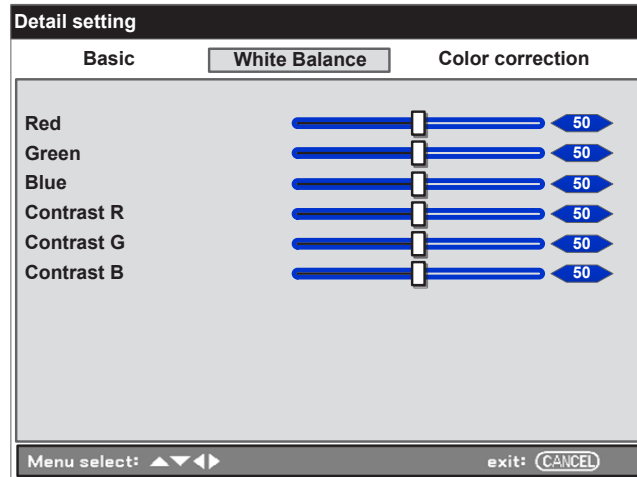


*Color temp. and BrilliantColor are not available when Image Select is set to **High-bright** or **Presentation**.*

Adjust menu continued...

White balance and Color correction tabs

These tabs allow fine adjustment of color settings to correct for the source or viewing environment.



Notes

Adjust menu
Image tab
Detail setting sub-menu
White Balance tab

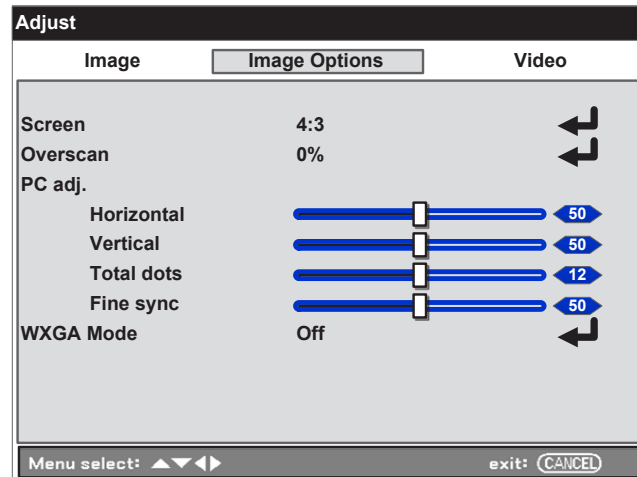
Adjust menu
Image tab
Detail setting sub-menu
Color correction tab

Adjust menu continued...

Image Options


- **Screen**
Set the aspect ratio of the projected image. Choose from **4:3**, **16:9**, **16:10**, **LetterBox**, **True** and **Normal**.
- **Overscan**
Remove unwanted artefacts from the edges of your image by cropping the edges or increasing the size of the image to force the edges off-screen.

Unwanted artefacts along the image edges usually occur when the projector is connected to a low quality input source.
Choose a level of overscan between 0% and 15%.
- **PC adj.**
Control the position of the projected image:
 - **Horizontal and Vertical**
Move the image along the horizontal or vertical axis.
 - **Total dots**
Fine tune a computer image or remove any vertical banding that might appear.
 - **Fine sync**
Adjust the clock phase or reduce video noise, dot or cross talk.
- **WXGA mode**
Choose **On** to give priority to WXGA (1280 x 768) modes.




Notes

Adjust menu Image Options tab

 **PC adj.** settings are used for **Computer 1** signals only. Their range and default values depend on the input standard.

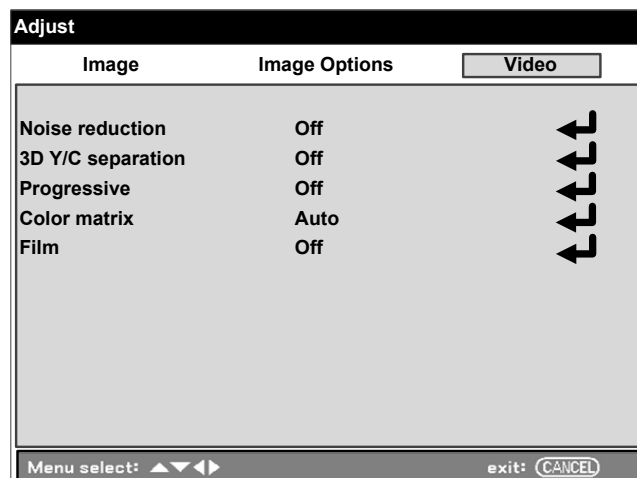
 Only use **Fine Sync** after you have adjusted the **Total dots** setting.

 When **WXGA mode** is set to **On**, XGA (1024 x 768) modes may not be displayed correctly.

Adjust menu continued...


Video

- **Noise reduction**
Set the noise reduction level as required.
- **3D Y/C separation**
Switch this setting on to increase the separation of Y (brightness) from C (color).
- **Progressive**
Choose the Progressive conversion (deinterlacing) method.
- **Color matrix**
In most cases, the **Auto** setting determines the correct color space to use. If it does not, you can choose a specific color space:
 - **RGB** uses RGB color space.
 - **SDTV** sets the color space to that defined in ITU-R BT.601.
 - **HDTV** sets the color space to that defined in ITU-R BT.709.
- **Film**
Set to **Auto** or specify the pulldown extraction method as required.




Notes

Adjust menu Video tab

 **3D Y/C separation** is only available on the Video and S-Video inputs.

 **Color matrix** is not available on the Video and S-Video inputs.

 The **Film** setting is available only for interlaced signals on the Video or S-Video inputs.

Volume control

Select **Volume** from the main menu to bring out the volume slider.

To exit the volume slider, press **MENU** or **RETURN**.

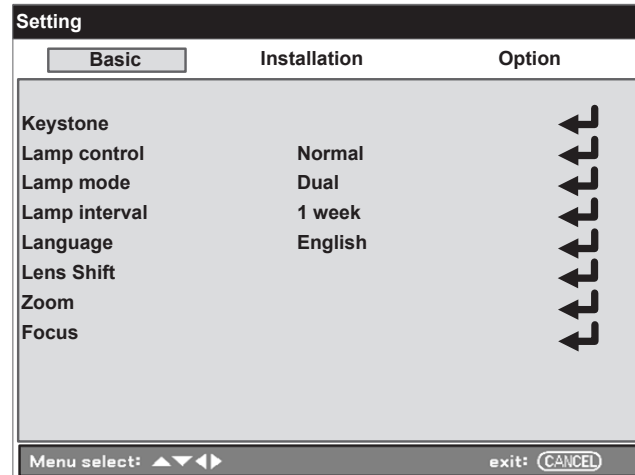


Setting menu


The **Setting** menu contains three tabs: **Basic**, **Installation** and **Option**.

Basic tab


- **Keystone**
Adjust horizontal and vertical keystone values.
- **Lamp control**
Choose between **Normal** and **Eco**. Using the **Eco** mode extends lamp life and reduces fan noise.
- **Lamp mode**
Choose whether you will use both lamps simultaneously (**Dual**) or one at a time (**Lamp 1** or **Lamp 2**).
- **Lamp interval**
If not in dual lamp mode, set the time period the projector will run each lamp before switching to the other. Choose from **Off**, **1 week**, **4 weeks** and **2000H**.
- **Language**
Set the language for all menus.
- **Lens Shift, Zoom and Focus**
Adjust as required.




Notes

 The **VOLUME +** and **VOLUME -** controls have dedicated buttons on both the remote control and the control panel.

Setting menu Basic tab

 In **Eco** mode the lamp will run at 80% power.

 The **Lens Shift**, **Zoom** and **Focus** controls have dedicated buttons on the projector control panel.

Setting menu continued...

Installation tab

- **Ceiling & Rear**

Desktop is for a unit standing on its feet; set to **Ceiling** if the projector is mounted upside down. **Front** and **Rear** define whether the projector is in front of the screen or behind it.

Select as required from **Desktop Front**, **Desktop Rear**, **Ceiling Front** and **Ceiling Rear**.

- **Communication speed**

Sets the Serial Port (RS232) baud rate. Longer cable connections may require lower speeds.

- **Display time**

Sets the amount of time a menu is displayed on the screen.

- **Background**

Defines what appears on the screen when there is no input signal.

- **PIN code lock**

When the PIN code lock is enabled, a security password will need to be entered before the projector can be used, or before the lock can be disabled.

When setting the lock for the first time, the password needs to be entered twice, to ensure that it is correct.

The password is a combination of the **LEFT** ◀, **RIGHT** ▶, **UP** ▲ and **DOWN** ▼ arrows, between four and ten characters long.

- **Key lock**

Enable this setting to lock the control panel. To unlock the control panel, press and hold **RETURN** for ten seconds.

- **DynamicBlack**


Set to **On** or **Off** as required.


Setting		
Basic	Installation	Option
Ceiling & Rear	Desktop front	←
Communication speed	4800bps	↕
Display time	Auto 5 sec	↕
Background	Blue	↕
PIN code lock	Off	↕
Key lock	Off	↕
DynamicBlack	Off	↕
RC sensor	Both	↕
Network setting		↕
Standby mode	Normal	↕
PC control	PC control	↕


Menu select: ▲▼◀▶ exit: CANCEL


Notes

Setting menu Installation tab

 The **Communication speed** setting is not available if **PC control** is set to **Network**.

 **Make a note of your password and keep it safe. If you are unable to retrieve the password, the projector can no longer be started. Contact your dealer for assistance.**

 **Key lock** does not affect the remote control.

 **DynamicBlack** reduces the overall light output for images that contain a lot of black. This improves the perceived contrast ratio.




Setting menu continued...

Installation tab - continued

- **RC sensor**
Controls whether the projector will use the infrared sensor at the front, the one at the back, or both.
- **Network setting**
This sub-menu allows you to adjust network settings.
- **Standby mode**
Choose between **Normal** and **Power-saving** standby mode.
- **PC control**
Choose from **PC Control** (RS232) or **Network** (LAN) as the remote connection used for external control of the projector.

Notes

Setting menu Installation tab

-  See the next page for a detailed description of all settings and commands available from the **Network setting** sub-menu.
-  In **Power-saving** standby mode the following functions are not available:
 - Monitor Out
 - HTTP server functions
 - Network modeso it will not be possible to turn the projector on remotely, except via the Serial Port.
-  In **Normal** standby mode, the Warning indicator shows a green light, while in **Power-saving** mode it is unlit.

Setting menu continued...

Network setting sub-menu

The Network setting menu contains the following settings:

- **DHCP**
Set **DHCP** to **Enable** if the IP address is to be assigned by a DHCP server, or **Disable** if it is to be set here.
- **IP Address, Subnet, Gateway** and **DNS**
If **DHCP** is set to **Disable**, edit these settings as required.

In order for the settings to take effect, select **Apply settings** and press **ENTER** to execute the command.

Network setting		
Setting		
DHCP	<input type="radio"/> Enable	<input checked="" type="radio"/> Disable
IP address	172 . 16 . 7 . 15	
Subnet	255 . 255 . 255 . 0	
Gateway	<input checked="" type="radio"/> Enable	<input type="radio"/> Disable
	172 . 16 . 7 . 201	
DNS	<input checked="" type="radio"/> Enable	<input type="radio"/> Disable
	172 . 16 . 1 . 84	
Apply settings	↩	
Menu select: ▲▼◀▶		
exit: CANCEL		

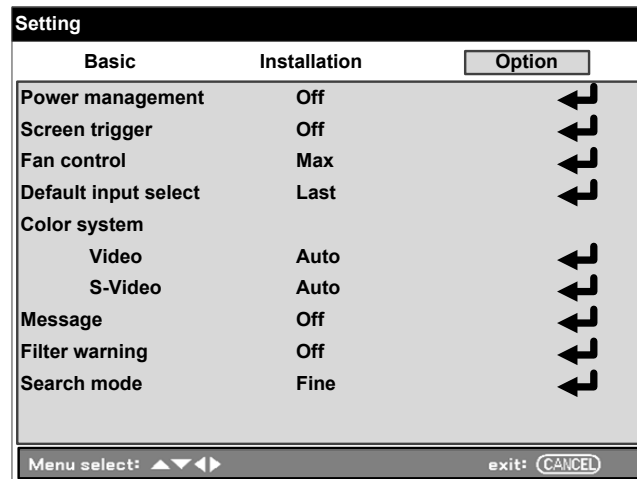
Notes

Setting menu
Installation tab
Network setting

Setting menu continued...

Option tab

- **Power management**
Set the amount of time the projector will remain on without an input source before going into standby mode.
- **Screen trigger**
Set this to **On** to enable the screen trigger.
- **Fan control**
Max increases the fan speed to compensate for reduced air density at high altitude.
- **Default input select**
If **Default input select** is set to **Auto**, the projector will cycle the inputs until a source is detected. If set to **Last**, the default input will be the last used.
- **Color system**
Choose the color system for Video and S-Video. Select from **Auto**, **NTSC**, **PAL** and **SECAM**.
- **Message**
If you do not want projector status messages to be displayed, set **Message** to **Off**.
- **Filter warning**
Choose a **Filter warning** time interval from the list, or select **Off**.
- **Search mode**



Notes

Setting menu
Option tab

Information menu

The information menu is arranged in four tabs: **Usage time**, **Input**, **Network** and **Version**.

Usage time tab

Displays information about lamp usage, projector running time and filter time.

Input tab

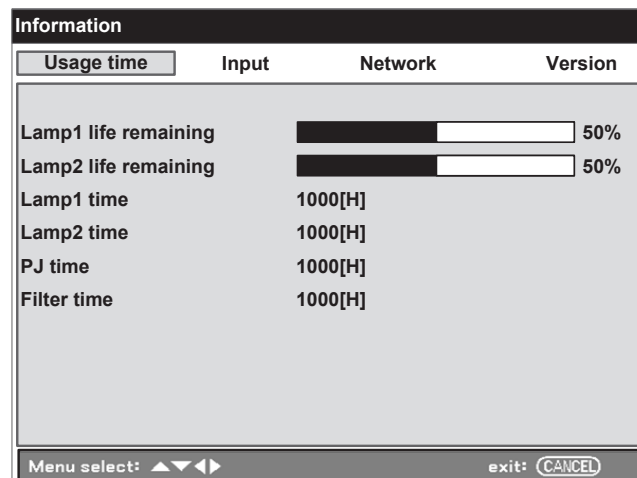
Displays information about the active source.

Network tab

Displays network information.

Version tab

Displays the model name and firmware version.



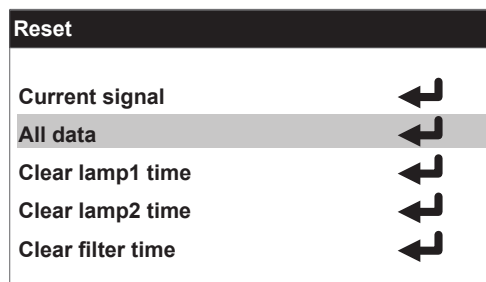
Reset menu

The **Reset** menu allows you to restore factory default settings. You can choose to reset the following:


- **Current signal**
All items in the **Adjust** menu can be reset.
- **All data**
Resets all settings apart from **Language**, **Background**, **Key lock**, **Security**, **Network mode**, **Communication speed**, **Lamp life remaining**, **Lamp time** and **Filter time**.
- **Clear lamp1 time**, **Clear lamp2 time** and **Clear filter time**
Use when replacing lamps or cleaning the filter.

To reset any of the above settings:


1. Select one of the options and click **ENTER**.
2. In the confirmation dialog, select **OK** and click **ENTER** again to confirm your choice.



Notes

 The lamp life percentage shown here is based on expected lamp life in controlled laboratory conditions.

The actual life may vary depending on installation environment, orientation and lamp mode (**Normal** or **Eco**).

 Network settings are configured in the **Network setting** menu. Go to the **Setting > Installation > Network setting**.

Menu Map

Menu **Sub Menus and Controls**

MAIN

Input, Adjust, Volume, Setting, Information, Reset

INPUT

Computer 1, Computer 2, Computer 3, Component, Video, S-Video

ADJUST

Image

Image select *High-bright*, Presentation, Video, Movie, Graphic, sRGB

Detail settings

Basic

Gamma *Dynamic*, Natural, Black detail

Color temp. 5000K, 6500K, 7800K, 8500K, 9300K, 10500K

BrilliantColor 1 ~ 3

White balance

Red 0 ~ 100 (50)

Green 0 ~ 100 (50)

Blue 0 ~ 100 (50)

Contrast R 0 ~ 100 (50)

Contrast G 0 ~ 100 (50)

Contrast B 0 ~ 100 (50)

Color correction

Red -60.0 ~ 60.0 (0.0)

Green -60.0 ~ 60.0 (0.0)

Blue -60.0 ~ 60.0 (0.0)

Yellow -60.0 ~ 60.0 (0.0)

Magenta -60.0 ~ 60.0 (0.0)

Cyan -60.0 ~ 60.0 (12.0)

Contrast 0 ~ 100 (50)

Brightness 0 ~ 100 (50)


Sharpness 0 ~ 31 (15)


Color 0 ~ 100 (50)


Tint 0 ~ 100 (50)


Reset


Notes






 The default values of the **Gamma**, **Color temp.** and **BrilliantColor** settings depend on the **Image select** setting.

 Some of the information in this menu map is summarised. See the actual menu on the projector for full detail.

 The underlined text represents the factory default value for each setting.

 Some menu options and controls may not be available due to settings in other menus. These will be shaded gray on the actual menu.

 Where it would be helpful, some menu options are described in more detail earlier in this guide.

Menu	Sub Menus and Controls	Notes
	<p>Image options Screen 4:3, 16:9, 16:10, Letterbox, True, <u>Normal</u> Overscan <u>0%</u>, 5%, 10%, 15% PC adj. Horizontal Vertical Total dot Fine sync WXGA mode <i>On</i>, <u><i>Off</i></u></p> <p>Video Noise reduction <i>Off, Low, Mid, High</i> 3D Y/C separation <i>On, Off</i> Progressive <i>Off, Still, Normal, Movie</i> Color matrix <u><i>Auto</i></u>, <i>RGB, SDTV, HDTV</i> Film <i>Off, 2-2, 2-3 Auto, 2-2 On, 2-3 On</i></p>	<p> The range and default values of the PC adj. settings depend on the input standard.</p>
<p>VOLUME 0-61</p>		
<p>SETTING</p>	<p>Basic Keystone Horizontal -100 ~ 100 (<u>0</u>) Vertical -100 ~ 100 (<u>0</u>) Lamp control <u><i>Normal</i></u>, <i>Eco</i> Lamp mode <u><i>Dual</i></u>, <i>Lamp1, Lamp2</i> Lamp interval <u><i>Off</i></u>, <i>1 week, 4 weeks, 2000H</i> Language <u><i>English</i></u>, <i>German, French, Italian, Spanish, Swedish, Japanese, Simplified Chinese, Traditional Chinese</i> Lens shift Zoom Focus</p>	<p> Some of the information in this menu map is summarised. See the actual menu on the projector for full detail.</p> <p> The <u>underlined text</u> represents the factory default value for each setting.</p> <p> Some menu options and controls may not be available due to settings in other menus. These will be shaded gray on the actual menu.</p> <p> Where it would be helpful, some menu options are described in more detail earlier in this guide.</p>

Menu	Sub Menus and Controls
	<p>Installation</p> <p>Ceiling & Rear <u>Desktop Front</u>, Ceiling Rear, Desktop Rear, Ceiling Front</p> <p>Communication speed 4800bps, 9600bps, 19200bps, <u>38400bps</u></p> <p>Display time Manual, Auto 5 sec, Auto 15 sec, <u>Auto 45 sec</u></p> <p>Background <u>Blue</u>, Black, Logo</p> <p>Pin code lock <u>Off</u>, On</p> <p>Key lock <u>Off</u>, On</p> <p>DynamicBlack <u>Off</u>, On</p> <p>RC sensor <u>Both</u>, Front, Back</p> <p>Network setting</p> <p style="padding-left: 20px;">DHCP <u>Enable</u>, <u>Disable</u></p> <p style="padding-left: 20px;">IP address</p> <p style="padding-left: 20px;">Subnet</p> <p style="padding-left: 20px;">Gateway <u>Enable</u>, Disable</p> <p style="padding-left: 20px;">DNS <u>Enable</u>, <u>Disable</u></p> <p style="padding-left: 20px;">Apply settings</p> <p>Standby mode <u>Normal</u>, Power-saving</p> <p>PC control <u>PC control</u>, Network</p> <p>Option</p> <p>Power management <u>Off</u>, 0:05, 0:10, 0:20, 0:30</p> <p>Screen trigger <u>Off</u>, On</p> <p>Fan control <u>Normal</u>, Max</p> <p>Default input select <u>Last</u>, Auto, Computer 1, Computer 2, Computer 3, Component, Video, S-Video</p> <p>Color system</p> <p style="padding-left: 20px;">Video <u>Auto</u>, NTSC, PAL, SECAM</p> <p style="padding-left: 20px;">S-Video <u>Auto</u>, NTSC, PAL, SECAM</p> <p>Message Off, <u>On</u></p> <p>Filter warning Off, 100H, 200H, <u>500H</u>, 1000H</p> <p>Search mode <u>Normal</u>, Fine</p>

RESET

Current signal





All data

Clear lamp1 time

Clear lamp2 time

Clear filter time

Notes

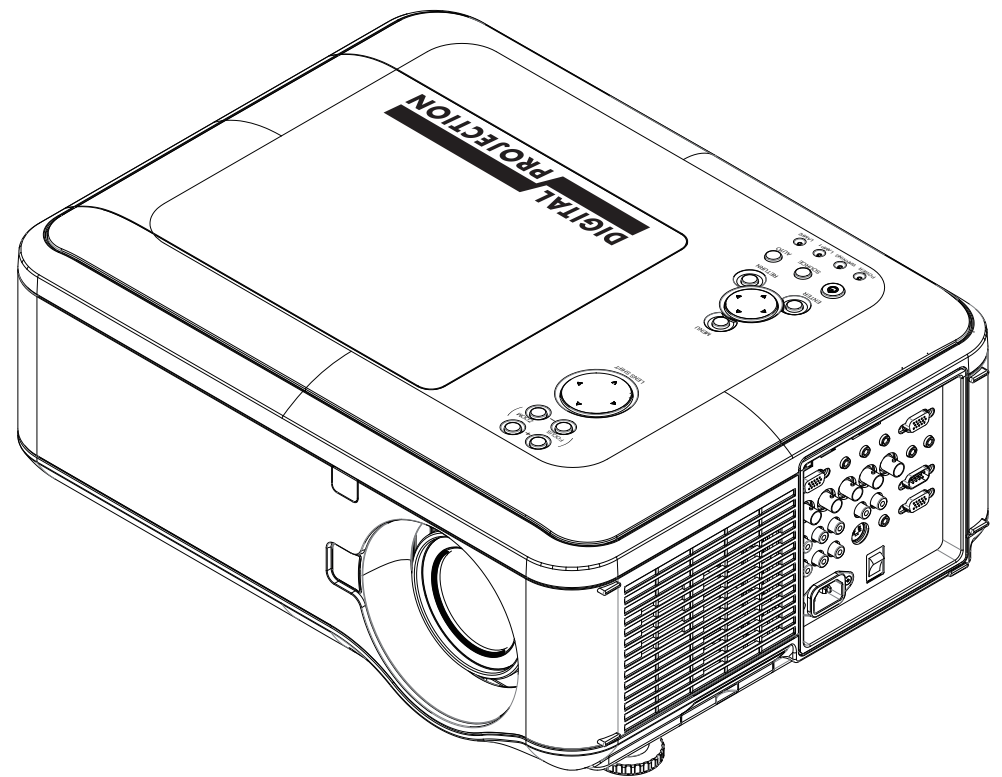
-  Some of the information in this menu map is summarised. See the actual menu on the projector for full detail.
-  The underlined text represents the factory default value for each setting.
-  Some menu options and controls may not be available due to settings in other menus. These will be shaded gray on the actual menu.
-  Where it would be helpful, some menu options are described in more detail earlier in this guide.

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REMOTE COMMUNICATIONS GUIDE

E-Vision 6000 Series

High Brightness Digital Video Projector



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Introduction

The projector can be controlled by using an external control system in three different ways:

- The projector's features can be controlled via a serial connection, using the control strings described in this guide.
- The projector's features can be controlled via a LAN connection, using the industry standard **PJLink** commands.
- A number of basic picture and input settings can be controlled directly using the embedded LAN Control utility.

Notes

Serial Port Control Commands

There are three types of command, **Set commands**, **Get commands** and **Remote commands**. The individual commands are described later in this guide. All commands consist of ASCII text strings ending with an ASCII carriage return character [CR].

- Set commands: <header code> <command> [CR]
- Set commands with data: <header code> s <command> <data> [CR]
- Get commands: <header code> q <command> [CR]
- Remote commands: <header code> r <command> [CR]

Header code

The header code comprises the following character:

ASCII: ~

Hex: 7E

Examples

Power On:

ASCII: ~ P N [CR]

Hex: 7E 50 4E 0D

Set brightness to 25:

ASCII: ~ s B 25 [CR]

Hex: 7E 73 42 32 35 0D

Get brightness (brightness is 18 in this example):

ASCII: ~ q B [CR] The projector returns: 18

Hex: 7E 71 42 0D The projector returns: 31 38

Simulate pressing of **BLANK** remote key:

ASCII: ~ r B [CR]

Hex: 7E 72 42 0D

Notes



Use a null-modem cable to connect the projector to a PC.



The **Serial Port** settings are:

- Communication speed (baud rate) - 38,400 bps
- Data length - 8 bits
- Stop bits - one
- Parity - none
- Flow control - none



The **Communication speed** (baud rate) can be adjusted. For details, see the **Operating Guide**.

The commands

The commands are divided into three groups: Set Commands, Get Commands and Remote Commands.

Set Commands			
ASCII	Hex	Function	Description
~ P N [CR]	7E 50 4E 0D	Power On	
~ P F [CR]	7E 50 46 0D	Power Off	
~ A I [CR]	7E 41 49 0D	Auto Image	
~ S 1 [CR]	7E 53 31 0D	Select Input 1 (Computer 1)	
~ S 2 [CR]	7E 53 32 0D	Select Input 2 (Computer 2)	
~ S 3 [CR]	7E 53 33 0D	Select Input 3 (Computer 3)	
~ S 4 [CR]	7E 53 34 0D	Select Input 4 (Component)	
~ S 5 [CR]	7E 53 35 0D	Select Input 5 (Video)	
~ S 6 [CR]	7E 53 36 0D	Select Input 6 (S-Video)	
~ s B ? [CR]	7E 73 42 ? 0D	Brightness	? = the value to be set, between 0 and 100 (the default is 50)
~ s C ? [CR]	7E 73 43 ? 0D	Contrast	? = the value to be set, between 0 and 100 (the default is 50)
~ s R ? [CR]	7E 73 52 ? 0D	Color	? = the value to be set, between 0 and 100 (the default is 50)
~ s N ? [CR]	7E 73 4E ? 0D	Tint	? = the value to be set, between 0 and 100 (the default is 50)
~ s A ? [CR]	7E 73 41 ? 0D	Screen	? = the value to be set; 0 = 4:3; 1 = 16:9; 2 = 16:10; 3 = Side Cut; 4 = Letterbox; 5 = True; 6 = Normal
~ s T ? [CR]	7E 73 54 ? 0D	Color Temperature	? = the value to be set; 0 = 5000K; 1 = 6500K; 2 = 7800K; 3 = 8500K; 4 = 9300K; 5 = 10500K
~ s J ? [CR]	7E 73 4A ? 0D	Ceiling & Rear	? = the value to be set; 0 = Desktop Front; 1 = Ceiling Rear; 2 = Desktop Rear; 3 = Ceiling Front

Notes

Spaces are shown in the examples for clarity, but are NOT used in the actual commands or replies.

Notes

Spaces are shown in the examples for clarity, but are NOT used in the actual commands or replies.

Get Commands			
ASCII	Hex	Function	Return String
~ q V [CR]	7E 71 56 0D	Software Version	The current software version.
~ q P [CR]	7E 71 50 0D	Power State	On or Off
~ q S [CR]	7E 71 53 0D	Input Select	One of the following: Computer1, Computer2, Computer3, Component, Video, S-Video
~ q L [CR]	7E 71 4C 0D	Lamp Hours	Between 0 and 2000, between 0 and 2000
~ q L1 [CR]	7E 71 4C 31 0D	Lamp1 Hours	Between 0 and 2000
~ q L2 [CR]	7E 71 4C 32 0D	Lamp2 Hours	Between 0 and 2000
~ q B [CR]	7E 71 42 0D	Brightness	Between 0 and 100
~ q C [CR]	7E 71 43 0D	Contrast	Between 0 and 100
~ q R [CR]	7E 71 52 0D	Saturation	Between 0 and 100
~ q N [CR]	7E 71 4E 0D	Tint (Video)	Between 0 and 100
~ q A [CR]	7E 71 41 0D	Screen	One of the following: 4:3, 16:9, 15:9, Crop, Letterbox, Native, Normal
~ q T [CR]	7E 71 54 0D	Color Temperature	One of the following: 5000K, 6500K, 7800K, 8500K, 9300K, 10500K, High-Bright
~ q J [CR]	7E 71 4A 0h	Ceiling & Rear	One of the following: Front, Rear+Ceiling, Rear, Ceiling

Remote Commands		
ASCII	HEX	Function
~ r U [CR]	7E 72 55 0D	UP arrow
~ r D [CR]	7E 72 44 0D	DOWN arrow
~ r L [CR]	7E 72 4C 0D	LEFT arrow
~ r R [CR]	7E 72 52 0D	RIGHT arrow
~ r P [CR]	7E 72 50 0D	POWER
~ r E [CR]	7E 72 45 0D	EXIT
~ r I [CR]	7E 72 49 0D	INPUT
~ r A [CR]	7E 72 41 0D	AUTO
~ r K [CR]	7E 72 4B 0D	KEYSTONE +
~ r J [CR]	7E 72 4A 0D	KEYSTONE -
~ r M [CR]	7E 72 4D 0D	MENU
~ r S [CR]	7E 72 53 0D	STATUS
~ r T [CR]	7E 72 54 0D	MUTE
~ r Z [CR]	7E 72 5A 0D	ZOOM + (Digital)
~ r Y [CR]	7E 72 59 0D	ZOOM - (Digital)
~ r B [CR]	7E 72 42 0D	BLANK
~ r F [CR]	7E 72 46 0D	FREEZE
~ r V [CR]	7E 72 56 0D	VOLUME +
~ r W [CR]	7E 72 57 0D	VOLUME -
~ r N [CR]	7E 72 4E 0D	ENTER
~ r 00 [CR]	7E 72 30 30 0D	FOCUS +
~ r 01 [CR]	7E 72 30 31 0D	FOCUS -
~ r 02 [CR]	7E 72 30 32 0D	ZOOM +
~ r 03 [CR]	7E 72 30 33 0D	ZOOM -
~ r C [CR]	7E 72 43 0D	KEYSTONE
~ r G [CR]	7E 72 47 0D	LENS SHIFT
~ r Q [CR]	7E 72 51 0D	ASPECT RATIO

Notes

Spaces are shown in the examples for clarity, but are NOT used in the actual commands or replies.

LAN Control Utility

It is possible to control some basic functions by using the embedded LAN Control Utility.

The LAN Control Utility web address is <http://<LAN IP Address>/index.html>.

The embedded web page shown here should appear.

Power ON/OFF

Click on the buttons to turn the projector on or into Standby mode.

Picture and Volume controls

Click on the arrows to adjust the settings as required.

Source Select

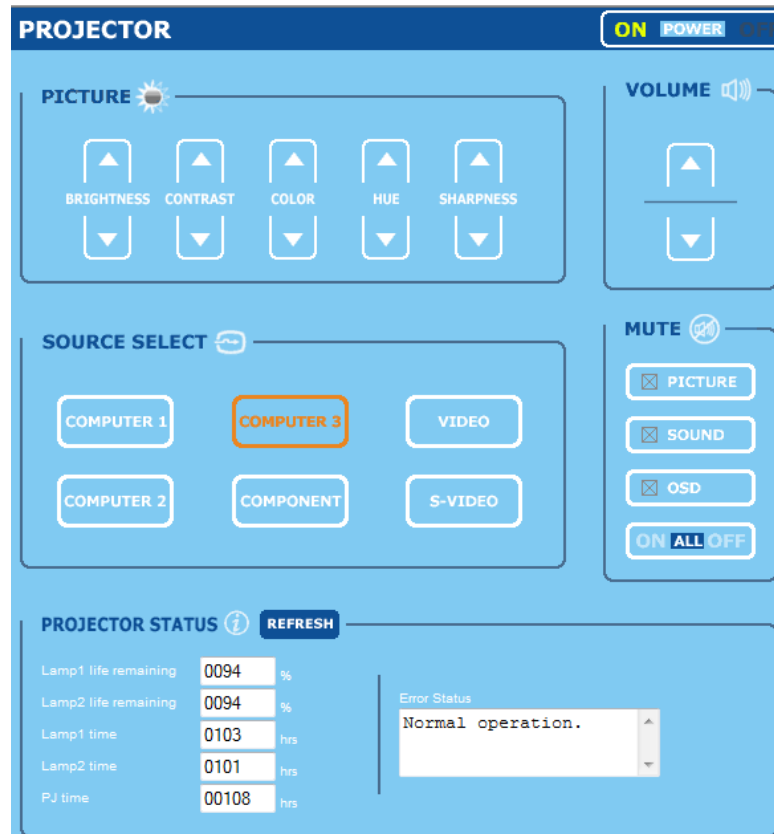
Click on the buttons to switch to the required input.

Mute

Click to switch video, sound and OSD on or off.

Projector Status

The panel shows the status of the lamps and filters. Click on **Refresh** to update the readings.



Notes

The LAN IP Address of the projector can be set from **Installation > Advanced Setting > Network** in the menu.

Use:
 a straight cable to connect to a hub or network, or
 a crossed cable to connect **ONLY** to a computer directly.

OSD Mute hides the OSD if it is displayed. It does not disable it.

The lamp life percentage shown here is based on expected lamp life in controlled laboratory conditions.

The actual life may vary depending on installation environment, orientation and lamp mode (**Normal** or **Eco**).

LAN Configuration

It is possible to assign a **Host Name** and **Domain Name** to the projector, and to set up an **Alert Mail** address and **PJLink** password:

The URL of the LAN Configuration page is <http://<LAN IP Address>/lanconf.html>.

The embedded web page shown here should appear.

Settings

Host Name

Up to 60 alpha-numeric characters can be entered. Press the **Apply** button to confirm the new name.

Domain Name

Up to 60 alpha-numeric characters. Press the **Apply** button to confirm the new name.

Mail

When enabled, an email will be sent to up to three specified addresses, when the lamp reaches the end of its usable life, or if an error occurs on the projector. Press the **Apply** button to confirm the new settings.

A test mail can be sent to check that the settings have been made correctly. Press the **Execute** button to send the test message.

PROJECTOR

DOMAIN

Host Name

Domain Name

MAIL

Alert Mail Enable Disable

Sender's Address

SMTP Server Name

Recipient's Address 1

Recipient's Address 2

Recipient's Address 3

TEST MAIL

Test Mail Status

PJLINK

PJLink On Off

Password

Notes

PJLink

When enabled, a password can be set. Press the **Apply** button to confirm the new password.

The projector supports all the commands of PJLink Class 1.

The projector signal inputs have the following PJLink equivalents:

Projector input	PJ Link input	Parameter
Computer 1	RGB 1	11
Computer 2	RGB 2	12
Computer 3	DIGITAL 1	31
Component	VIDEO 3	23
Video	VIDEO 1	21
S-Video	VIDEO 2	22

Notes

The PJLink specification can be downloaded from <http://pjlink.jbmia.or.jp/english> - click on the **Specifications** link.



The PJ link password can be set at <http://<LAN IP Address>/lanconf.html>



The TCP Port number is 5450.