DIGITAL PROJECTION

USER GUIDES

INSTALLATION AND QUICK-START GUIDE
CONNECTION GUIDE
OPERATING GUIDE

Titan Pro series III

High Brightness Digital Video Projector

Rev A May 2012

112-884A

About these Guides

Please read this guide carefully before using the projector, and keep it handy for future reference.

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

Symbols used in these guides

Warnings

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.

Notes

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. Projectors built prior to this revision of the Operating Guide may therefore not include all the features described.

DIGITAL PROJECTION

INSTALLATION AND QUICK-START GUIDE

Titan Pro series III

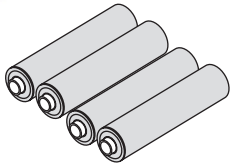
High Brightness Digital Video Projector

Rev A May 2012

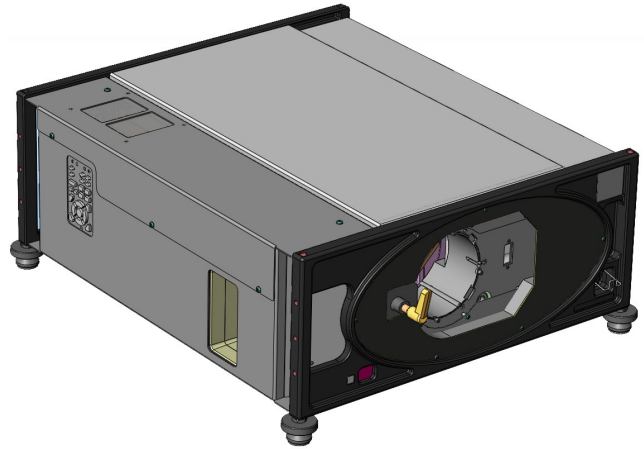
CONTENTS

What's in the Box?

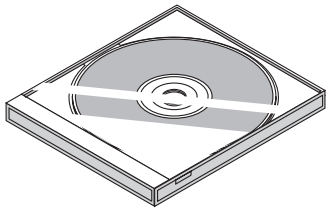
Remote control (105-023)



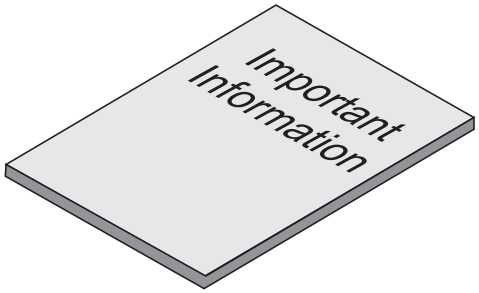
4x AAA batteries



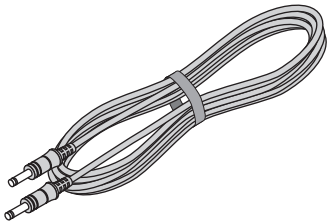
Projector



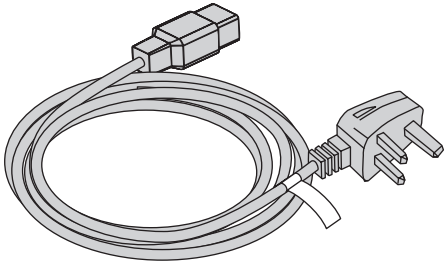
User Guides on CD (112-889)



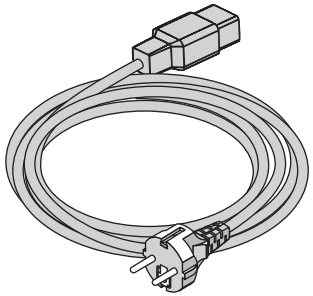
Important Information (112-888)



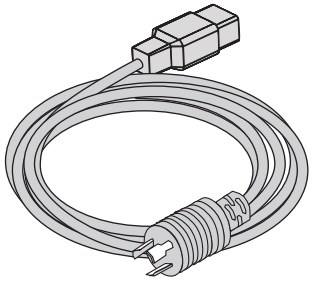
Remote cable (102-162)



Power cable, United Kingdom (112-000)



Power cable, Europe (112-001)



Power cable, North America (112-002)

Notes

Make sure your box contains everything listed. If any pieces are missing, contact your dealer.

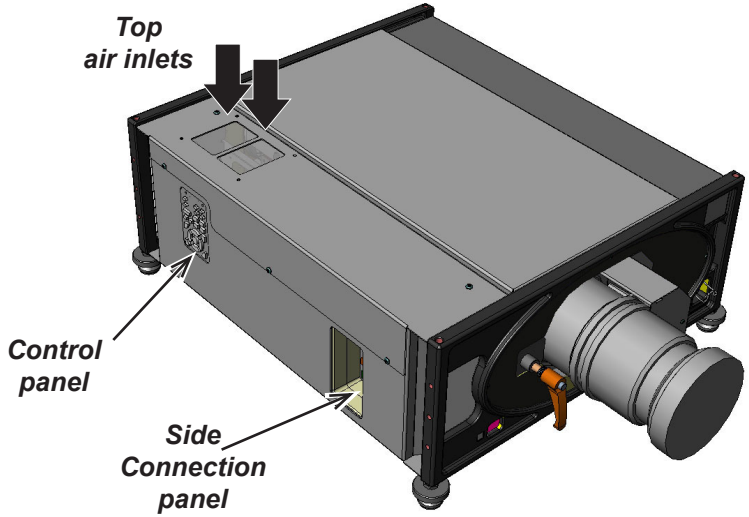
You should save the original box and packing materials, in case you ever need to ship your Projector.

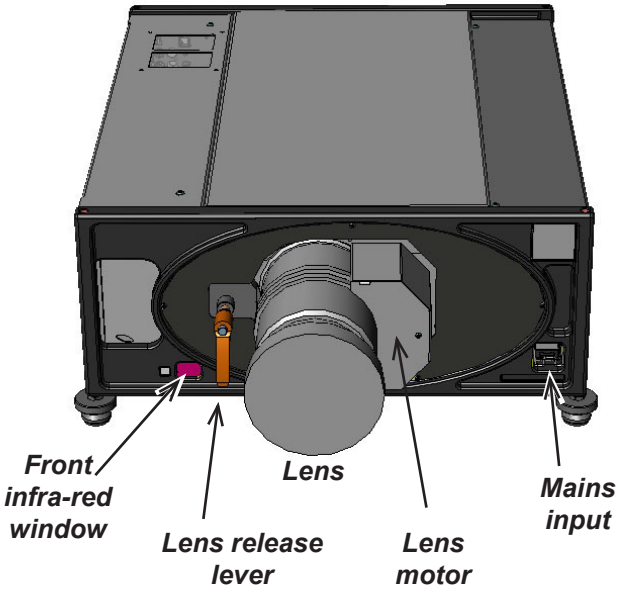
The projector is shipped without a lens.

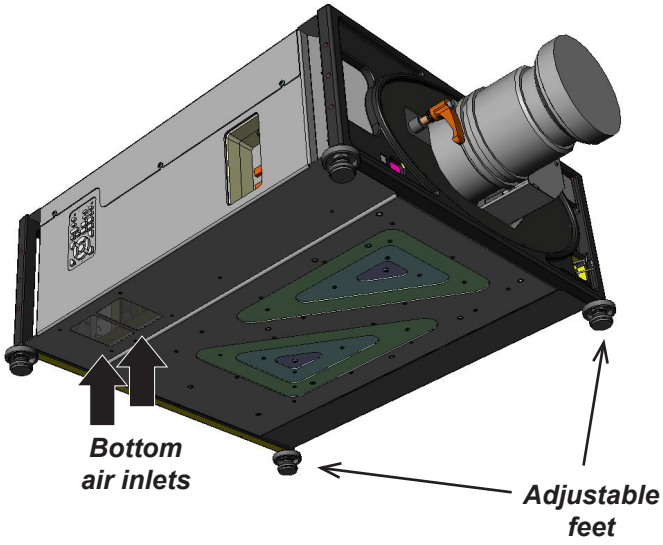
Only one power cable - dependent on the destination territory - will be supplied with the projector.

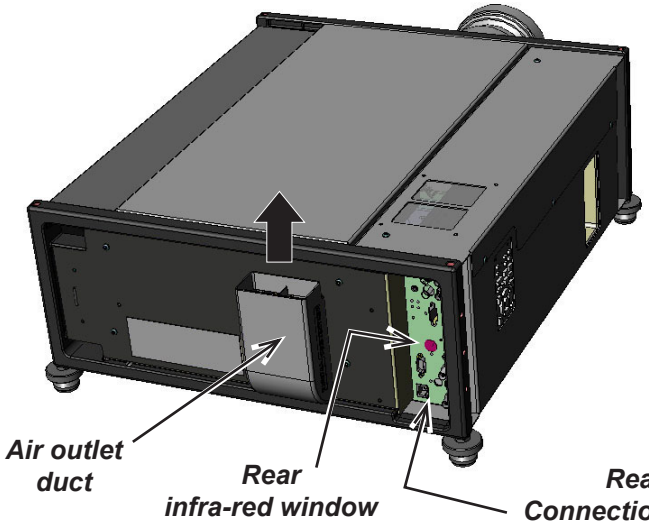
Getting to Know the Projector

Front and rear views









Notes

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

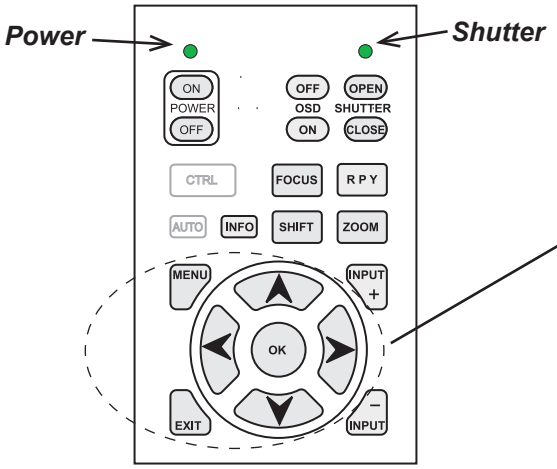
Control panel

The indicators on the control panel are as follows:

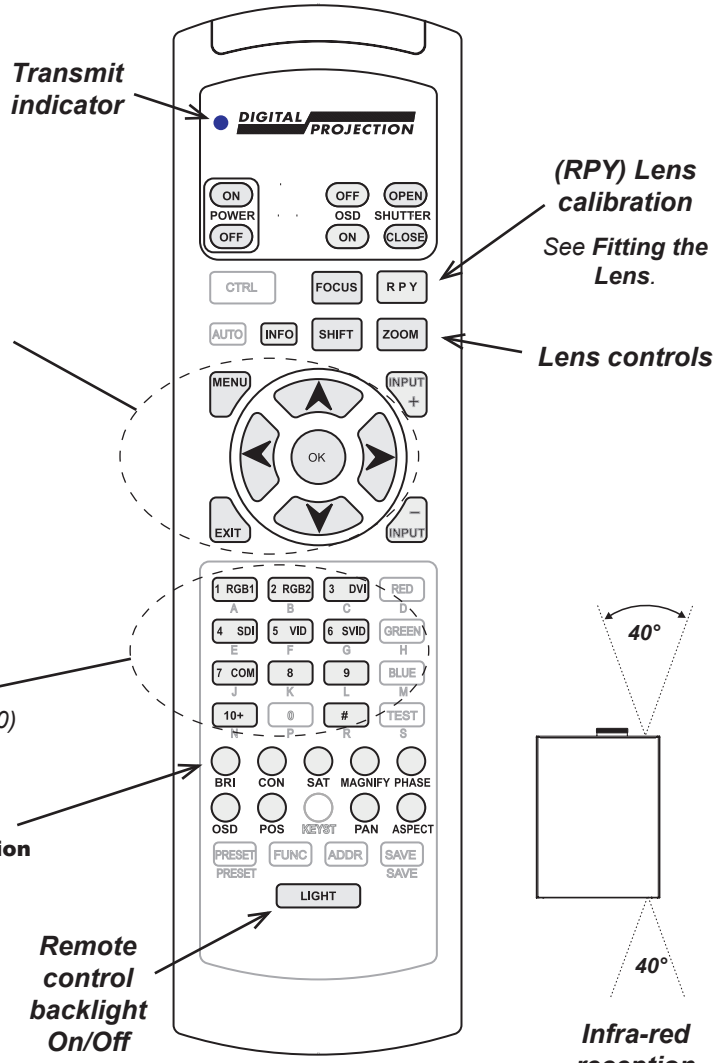
Power ***off*** = NO POWER

green = normal RUNNING mode ***amber*** = STANDBY mode

Shutter amber = CLOSED ***green*** = OPEN



Remote control



Notes

The projector uses the standard Digital Projection infra-red remote control.

Only the controls shown highlighted are used on this projector.

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

Each time a lens is fitted to the projector, the calibration procedure must be carried out.

*(see the **Fitting the Lens**)*

Connection panel indicators

The indicators on the rear connection panel are as follows:

All on = Power-On Self Test

Lamps 1,2 ***off*** = OFF

green = ON (100%) ***amber*** = 85-99% (on some models)

flashing green = WARM-UP ***flashing amber*** = COOL-DOWN

red (projector in standby) = Lamp Comms Error (call service)

red (projector on) = Ballast Comms Error (call service)

flashing red (projector in standby) = Lamp Error on previous operation

flashing red (projector on) = Lamp / Interlock Error

Error ***flashing*** = Fan / System Error ***steady*** = Voltage Error

IR ***blue flash*** = Remote control command received

Inputs The indicators next to the input connectors on both panels are as follows:

off = not selected

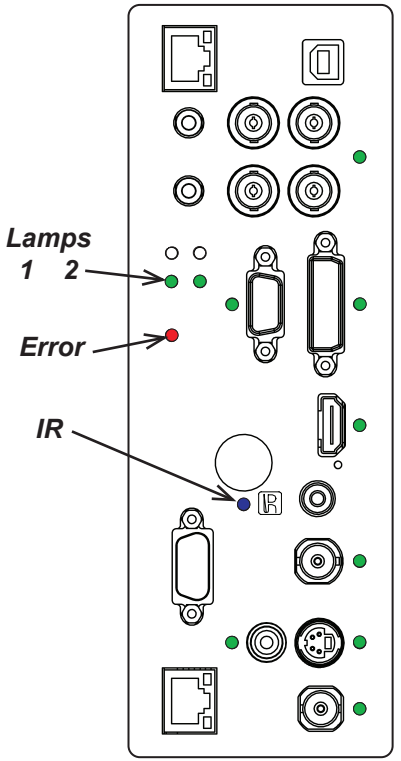
green = input selected, signal detected, and in range

flashing green = input selected, but signal not detected or out of range

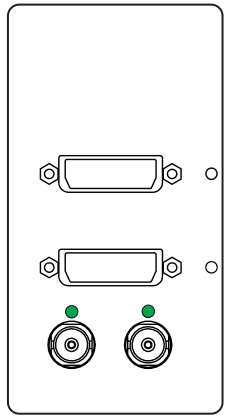
Notes

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

*For more information about the connection panels, see the **Connection Guide**.*



Rear Connection Panel



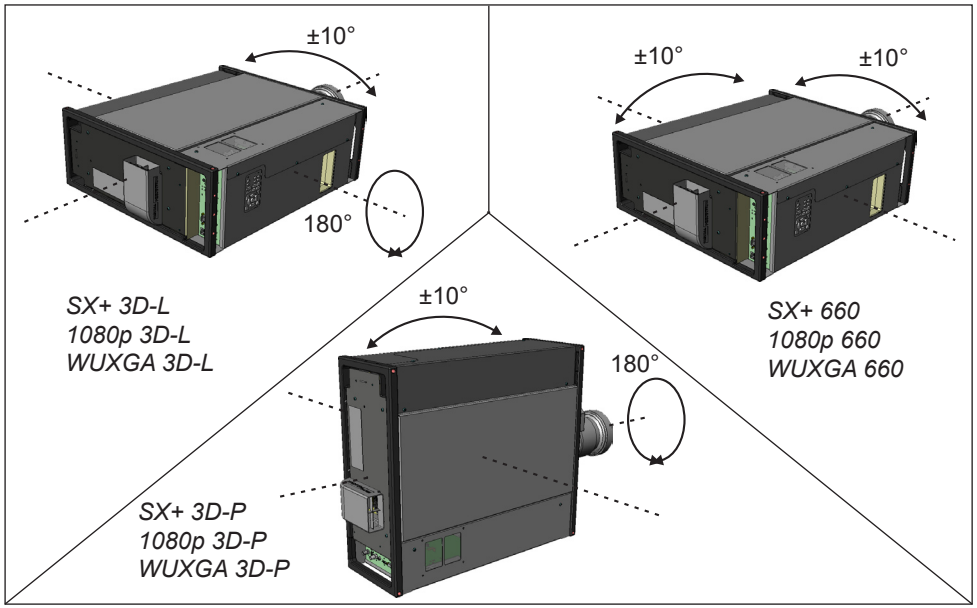
Side Connection Panel

Positioning the Screen and Projector

- Install the screen, ensuring that it is in the best position for viewing by your audience.
- Position the projector, ensuring that it is at a suitable distance from the screen for the image to fill the screen.

Tilting the Projector

Do not tilt the projector more than is shown in the tilt diagrams, when in use, as this may cause serious lamp failure, damage the lamp module and cause extra cost on replacement.



Chassis adjustment

- If the projector is to be operated from a flat surface such as a projector table, then adjustment of projector level should be made by turning the four feet under the chassis. Set the adjustable feet so that the projector is level, and perpendicular to the sceen.

Notes

Always allow the lamp to cool for 5 minutes before:

- disconnecting the power
- moving the projector

Ensure that there is at least 30cm (12in) of space between the ventilation outlets and any wall, and 10cm (4in) on all other sides.

Do not place the projector with its front panel down on a surface, as this may damage the lens or the lens release lever.

Fitting and adjusting the optional Rigging Frame

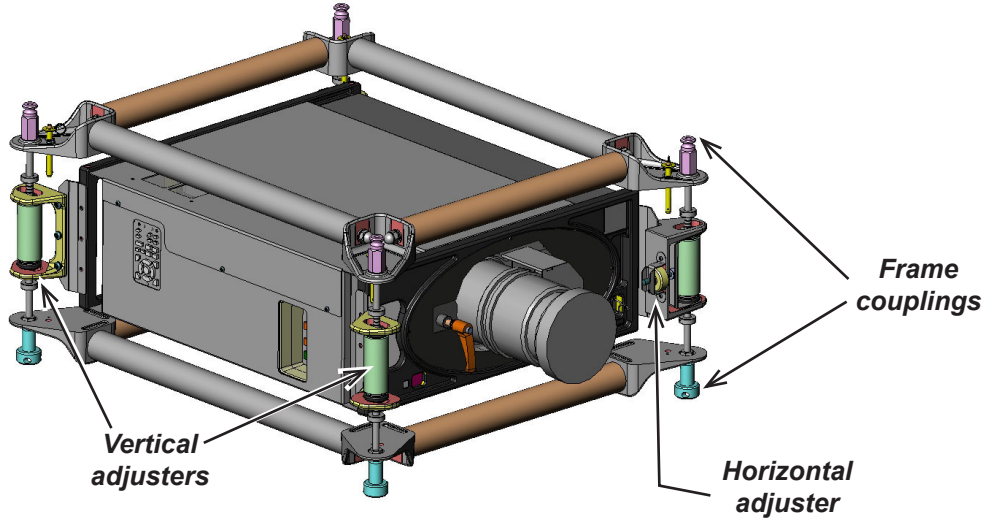
Fitting

- Remove the four adjustable feet.
- Secure the rigging frame to the projector, as shown, making sure that the male frame couplings are at the top. Secure each adaptor plate to the projector (three screws), and secure each of the adjuster brackets to an adaptor plate (three screws).

Stacking

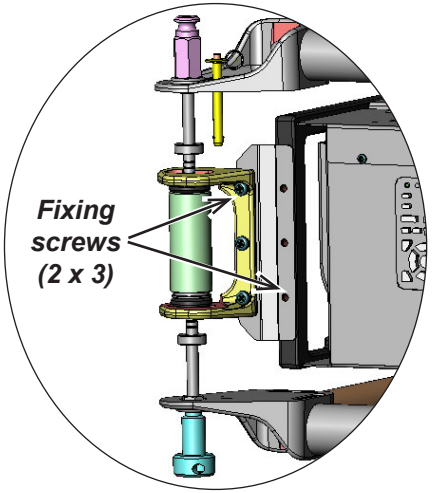
The projectors can be stacked on top of each other, or suspended below each other.

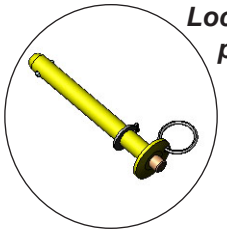
- Carefully lower each projector down onto the top of the others, making sure that all four frame couplings engage fully.
- Fit a locking pin into each coupling. A ball in the end of the pin prevents the pin from falling out – to insert or remove a locking pin, press the button on the end of the pin to release the ball.

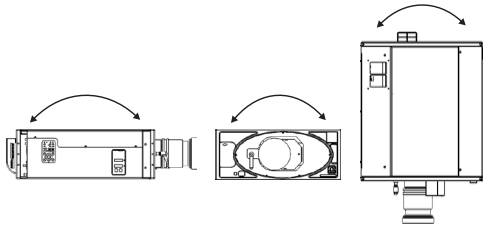


Pitch, Roll and Yaw

- To adjust the pitch, turn either the front pair or the rear pair of vertical adjusters, taking care to turn both adjusters by the same amount.
- To adjust the roll, turn either the left pair or the right pair of vertical adjusters, taking care to turn both adjusters by the same amount.
- To adjust the yaw, turn the single horizontal adjuster at the front.







Notes

Always allow the lamp to cool for 5 minutes before:

- disconnecting the power
- moving the projector

Do not place the projector with its front panel down on a surface, as this may damage the lens or the lens release lever.

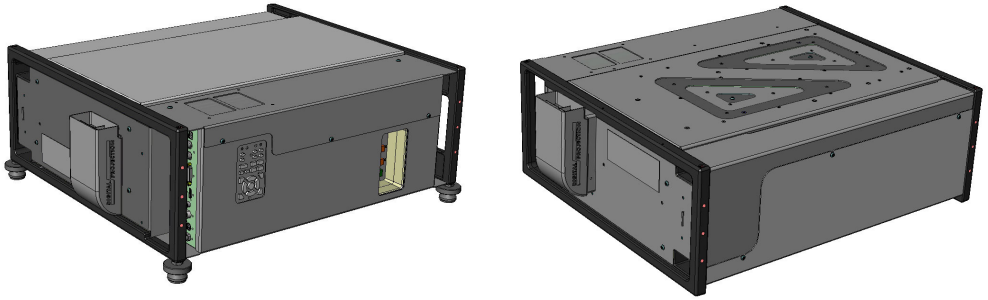
Do not stack more than 3 projectors.

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

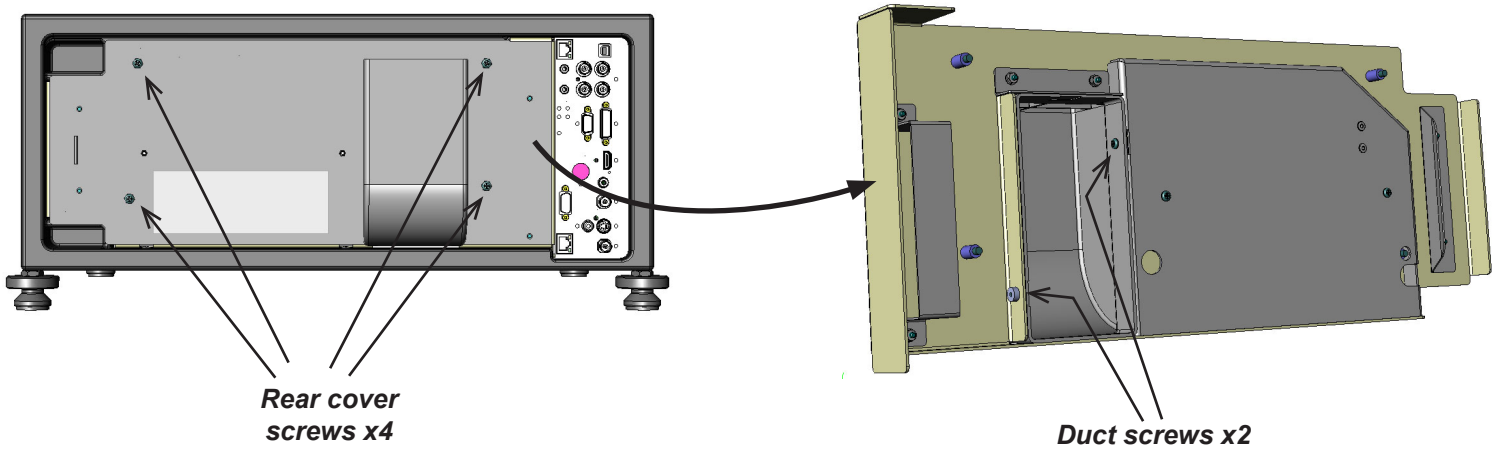
Backup safety chains or wires should always be used with ceiling mount installations.

Redirecting the Air Outlet Duct

The duct can be set to blow upwards whether the projector is in desktop or ceiling mode, as shown below.



- Unscrew the four screws securing the rear cover, then remove the cover.
- Working from the back of the cover panel, unscrew the two screws securing the duct
- Turn the duct through 180°, refit the two screws, then refit the cover.



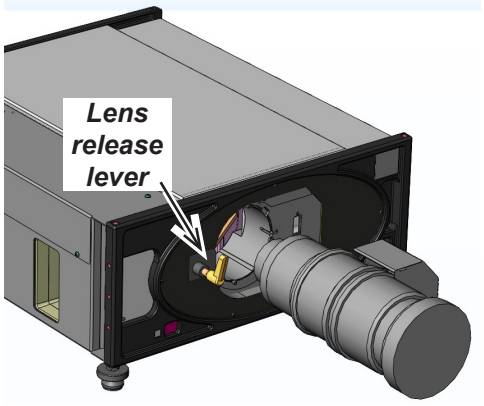
Notes

Always allow the lamp to cool for 5 minutes before:

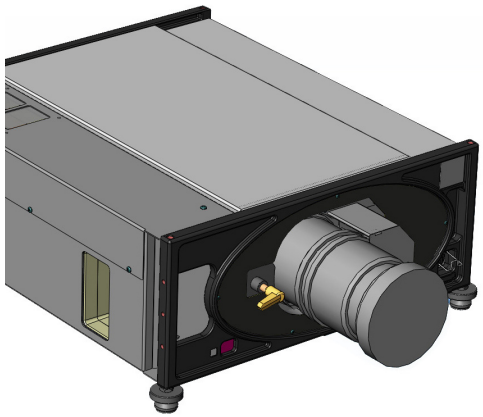
- disconnecting the power
- moving the projector

Fitting the Lens

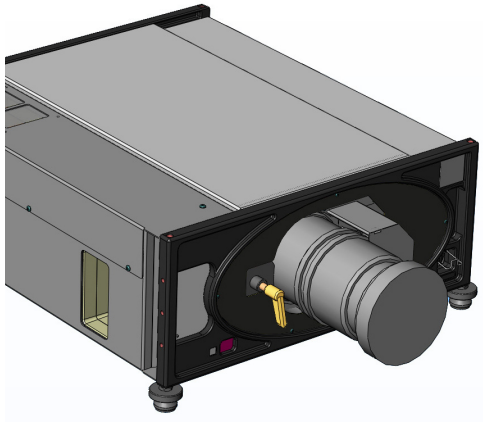
- Turn the lens release lever clockwise so that it is pointing upwards, to open the lock fully.
- Remove the rear lens cap from the lens.
- Insert the lens into the lens aperture, making sure that the plug on the zoom drive mechanism lines up with the socket on the front of the projector, then push the lens in firmly as far as it will go.



- Turn the lens release lever anti-clockwise to the mid-position.
- The lens can now be pushed in further. Push the lens in firmly as far as it will go.



- Turn the lens release lever fully anti-clockwise so that it is pointing downwards, to close the lock fully.



Lens Calibration

Each time a lens is fitted, the lens mechanism needs to be calibrated, as follows:

- Press **RPY** on the remote control or the control panel, then ◀, to calibrate the **Zoom** mechanism.
- Press **RPY** on the remote control or the control panel, then ▶, to calibrate the **Focus** mechanism.

  The drive mechanism will travel to both extremes, then stop.

Notes

Always allow the lamp to cool for 5 minutes before:

- disconnecting the power
- moving the projector

The lens release lever should always be set to the locked position to prevent the lens from falling out.

Do not place the projector with its front panel down on a surface, as this may damage the lens or the lens release lever.

Each time a lens is fitted to the projector, the calibration procedure must be carried out.

After calibrating the lens, you will need to re-adjust the Zoom and Focus.

Operating the Projector

Switching the Projector On

- Connect the power cable between the mains supply and the projector. Switch on at the switch next to the power connector.
- Wait until the self-test has completed and the standby indicator on the projector control panel shows amber. The lamp will be off and the projector will be in STANDBY mode.
- Press ON on the remote control or the control panel and hold for 3 seconds, to switch the projector ON. The power indicator on the control panel will show green, the lamp will light and the shutter will open.

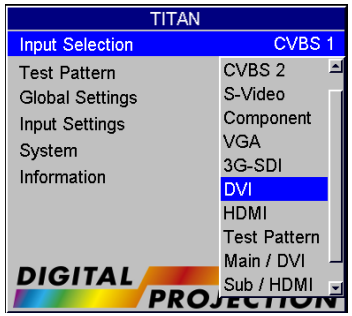
Selecting an Input Signal or Test Pattern

Input signal

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

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

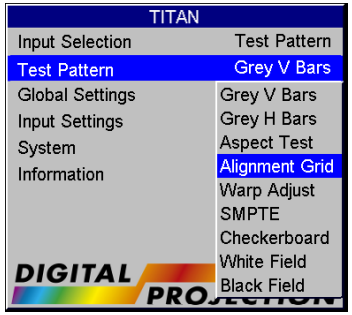
- Press one of the **Input buttons**, 1 to 10+ or # (dual pipe) on the remote control, or
- Open the **Main Menu**, by pressing MENU.
- Select from the **Input Selection menu**, using the ▲ ▼ and OK buttons.



Test pattern

If you have no image source connected to the projector, then you can display a test pattern instead:

- Open the **Main Menu**, by pressing MENU.
- Select **Test Pattern** from the **Input Selection menu**, using the ▲ ▼ and OK buttons.
- Select a pattern from the **Test Pattern menu**, using the ▲ ▼ and OK buttons.
- Close the **Main Menu**, by pressing MENU again.



Notes

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

Adjusting the Lens

- The lens can be adjusted using the **Lens Menu**, which is available from the **Global Settings Menu**, or:

Zoom

- Press ZOOM followed by ▲ and ▼ to adjust the size of the image on the screen.
- When the adjustment is finished, press EXIT.

Focus

- Press FOCUS followed by ▲ and ▼ to adjust the focus.
- When the adjustment is finished, press EXIT.

Shift

- Press SHIFT followed by ▲, ▼, ◀ and ▶ to adjust the position of the image on the screen.
- When the adjustment is finished, press EXIT.

Adjusting the Image

Orientation

- This can be set from the **Projector Menu**, which is available from the **Global Settings Menu**.

Control settings

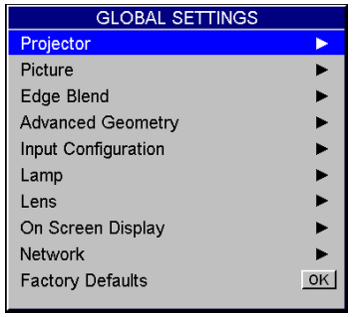
- Settings for the **On-Screen Display** and **Network** can be set from the **Global Settings Menu**.

Keystone

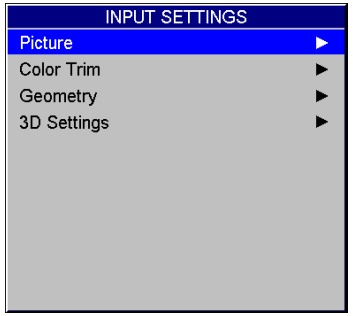
- This can be set from the **Advanced Geometry Menu**, which is available from the **Global Settings Menu**.

Picture

- Settings such as **Brightness** and **Contrast** can be set from the **Picture Menu**, which is available from the **Input Settings Menu**.
- You can also set **Brightness**, **Contrast** or **Saturation** by pressing BRI, CON or SAT on the remote control.



Main Menu
Global Settings



Main Menu
Input Settings

Notes

When any of the three Lens adjustment keys is pressed, the blue Transmit indicator on the remote control will light for 10 seconds:

- after 10 seconds, if no adjustment has been made, the indicator will go out and the Lens adjustment key must be pressed again to resume adjustment.

- to end the adjustment before 10 seconds has elapsed, press the EXIT key.

- all other adjustments will be locked out until the Lens adjustment is ended.

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

Switching the Projector Off

- Press (OFF) on the remote control or the control panel, and hold for 3 seconds, to switch the projector OFF. The power indicator on the control panel will show amber, the lamp will be off and the projector will be in STANDBY mode.
- 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

Titan Pro series III

High Brightness Digital Video Projector

Rev A May 2012

CONTENTS

Signal Inputs and Outputs

Rear Connection Panel

VGA *(input 1)*

- Use **Auto Setup** in the **Input Settings/Picture/VGA Setup** menu. For more settings, see the ***Operating Guide***.

HDMI *(input 2)*

- For settings, see the ***Operating Guide***.

DVI *(input 3)*

Analog or Digital DVI-I

- Set **DVI-I Port** in the **Global Settings/Input Configuration** menu to choose between **Analog** and **Digital**. For more settings, see the ***Operating Guide***.

SPDIF

- Compatible audio sample packets on the ***HDMI*** input stream are decoded by the projector and output on the ***SPDIF*** connector. This is a digital output.

3G-SDI *(input 4)*

- If two video streams are being transmitted, set **3G Level B Stream** in the **Input Configuration** menu to choose between the two streams.

CVBS1 *(Composite video BNC) (input 5)*

S-Video *(input 6)*

Component *(input 7)*

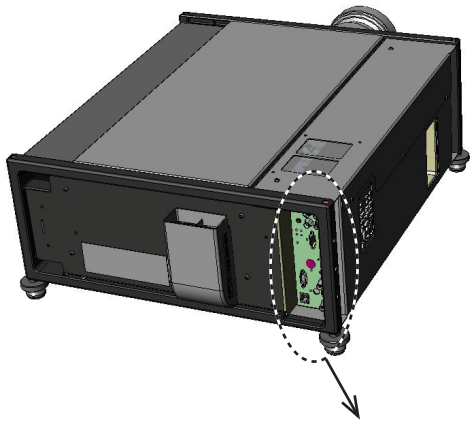
RGsB or RGBS

- Set **Component Colour Space** in the **Global Settings/Input Configuration** menu to **RGB**.
- Set **Component Sync Type** to **Auto**, except when the projector has problems selecting between **3 Wire** (RGsB) and **4 Wire** (RGBS).

YPbPr

- Set **Component Colour Space** in the **Global Settings/Input Configuration** menu to **YPbPr**.

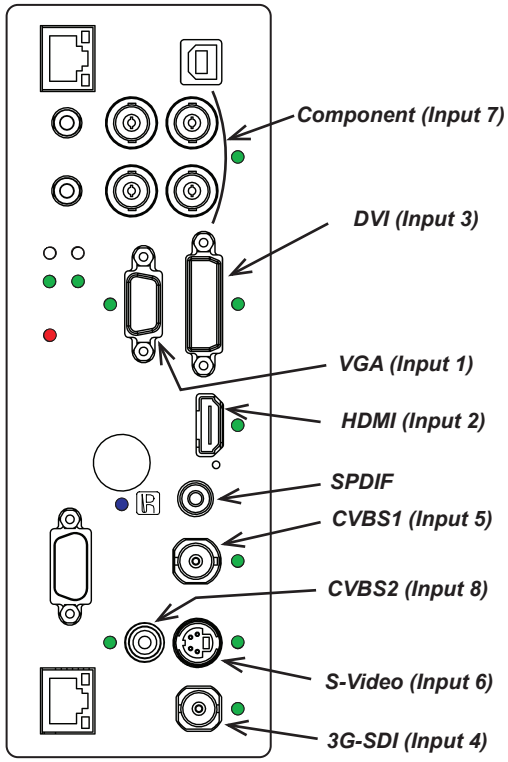
CVBS2 *(Composite video RCA phono) (input 8)*



Notes

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

See the next page for important information about the differences between the two connection panels.



Rear Connection Panel

Side Connection Panel

MAIN/DVI *(input 9)*

- Single or Dual Link DVI-D input

SUB/HDMI *(input 10)*

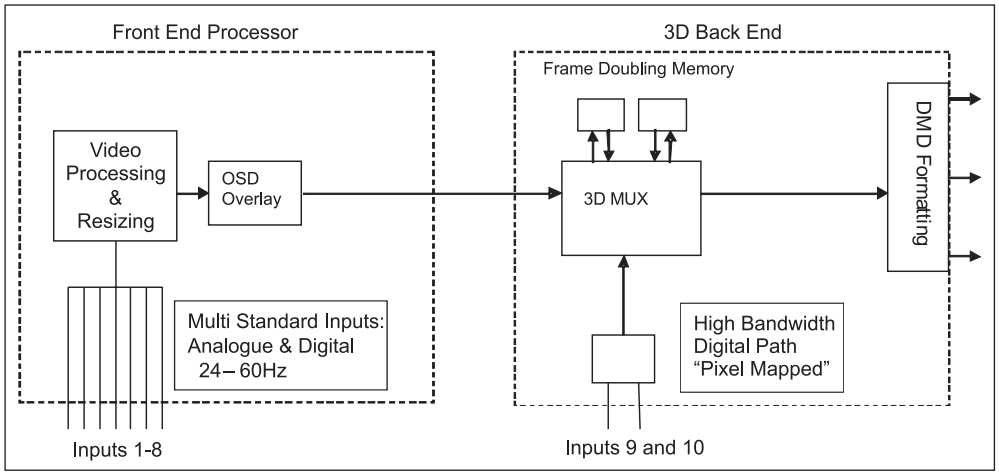
- Single HDMI 1.4 input (using an adaptor), or
- Single or Dual Link DVI-D input

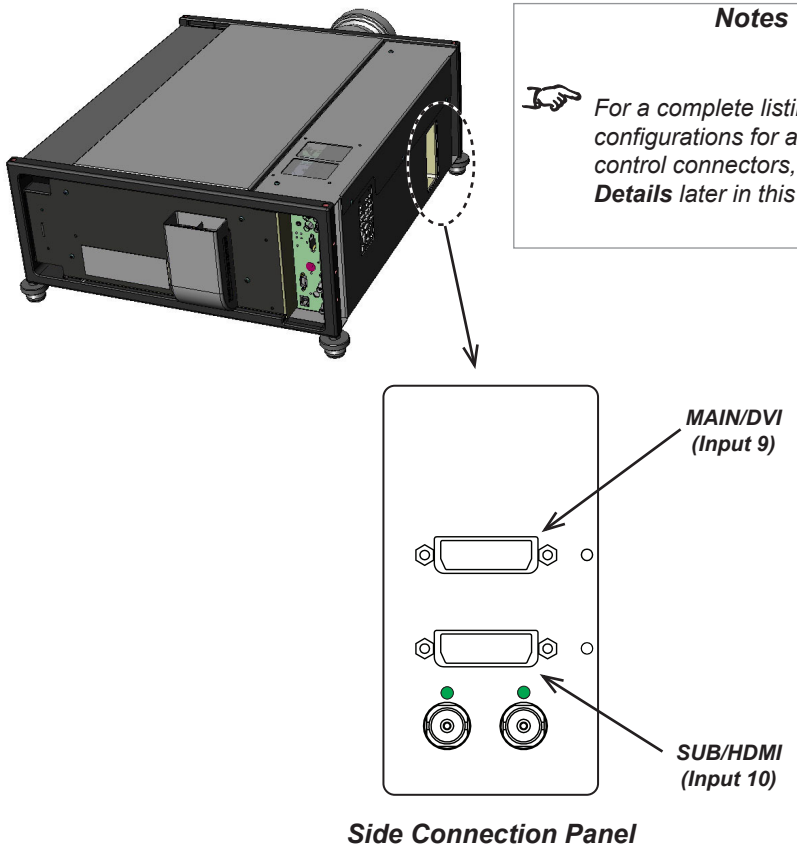
For information about 3D video, see the next page.

Differences between the two Connection Panels

Inputs 9 and 10 have been designed to give a very high bandwidth digital video path, free of the limitations inherent to standard image processing techniques.

As such, the image is pixel-mapped directly to the DMDs, so not all of the Image Controls available to Inputs 1-8 apply to Inputs 9 and 10.





Side Connection Panel

Notes

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

3D Connections

3D sources up to 60Hz requiring frame doubling and left/right interleaving

- Connect to any of the Inputs on the ***Rear Connection Panel***.
- Set **3D Type** in the **Input Settings/3D Settings** menu to **Auto**, except when the projector has problems selecting between **Sequential**, **Frame Packing**, **Top-and-Bottom** and **Side-by-Side (Half)**.

3D sources above 60Hz not requiring frame doubling

- Connect to either of the Inputs on the ***Side Connection Panel***.
- Set **3D Type** in the **Input Settings/3D Settings** menu to **Auto**, except when the projector has problems selecting between **Sequential**, **Frame Packing**, **Top-and-Bottom** and **Side-by-Side (Half)**.

Dual Pipe 3D

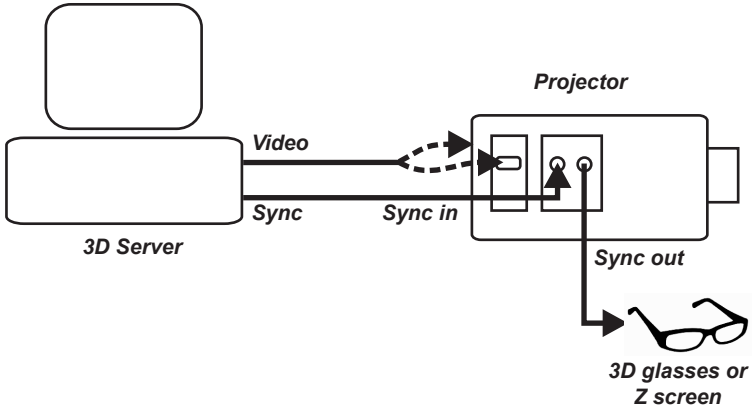
- Connect to both of the Inputs on the Side Connection Panel.
- ***Input 9*** (MAIN/DVI) is the ***left*** image, and ***Input 10*** (SUB/HDMI) is the ***right*** image.

3D Sync in

- Sync input signal.

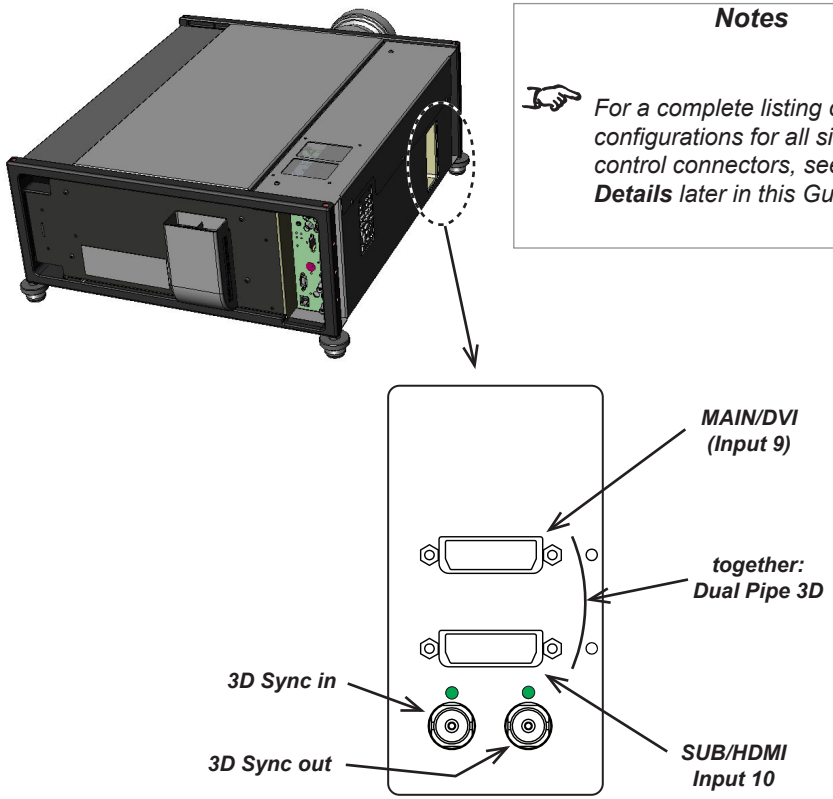
3D Sync out

- Sync output signal. This may be affected by the **Sync Offset** and **Output Sync Polarity** settings in the **Input Settings/3D Settings/Glasses Settings** menu.



Notes

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



Side Connection Panel

Supported Signal Input Modes

Signal		Resolution	Refresh Rate (Hz)	Total number of lines	Horizontal Frequency (kHz)	COMPOSITE	S-VIDEO	COMPONENT	VGA	DVI / HDMI	SDI
SDTV	480i	720 x 480	60	525	15.73	✓	✓	✓			✓
	576i	720 x 576	50	625	15.63	✓	✓	✓			✓
HDTV	480p	720 x 480	60	525	31.51			✓		✓	
	576p	720 x 576	50	625	31.25			✓		✓	
	720p50	1280 x 720	50	750	37.51			✓		✓	✓
	720p60	1280 x 720	60	750	45.00			✓		✓	✓
	1080psf24	1920 x 1080	48	1125	27.00			✓		✓	✓
	1080p24	1920 x 1080	24	1125	27.00			✓		✓	✓
	1080i50	1920 x 1080	50	1125	28.13			✓		✓	
	1080p25	1920 x 1080	25	1125	28.13			✓		✓	✓
	1080i60	1920 x 1080	60	1125	33.75			✓		✓	✓
	1080p30	1920 x 1080	30	1125	33.75			✓		✓	✓
	1080p50	1920 x 1080	50	1125	56.24			✓		✓	
	1080p60	1920 x 1080	60	1125	67.48			✓		✓	
COMPUTER	480p	640 x 480	60	525	31.47				✓	✓	
	VGA72	640 x 480	72	520	37.86				✓	✓	
	VGA75	640 x 480	75	500	37.50				✓	✓	
	SVGA56	800 x 600	56	625	35.16				✓	✓	
	SVGA60	800 x 600	60	628	37.88				✓	✓	
	SVGA72	800 x 600	72	666	48.08				✓	✓	
	XGA60	1024 x 768	60	806	48.36				✓	✓	
	XGA70	1024 x 768	70	806	56.48				✓	✓	
	XGA85	1024 x 768	85	808	68.68				✓	✓	
	WXGA60	1280 x 768	60	798	47.78				✓	✓	
	WXGA+60	1440 x 900	60	934	55.94				✓	✓	
	SXGA60	1280 x 1024	60	1066	63.98				✓	✓	
	SXGA+60	1400 x 1050	60	1089	65.32				✓	✓	
	UXGA60	1600 x 1200	60	1245	75.00				✓	✓	
	VESA1080p	1920 x 1080	60	1120	67.50				✓	✓	
	WUXGA60	1920 x 1200	60	1235	74.038				✓	✓	

Notes

Control Connections

Update Port

- The Update Port is used to download via LAN, firmware updates issued from time to time by Digital Projection.

Service Port

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

Wired Remote Control

- If infrared signals from the remote control cannot reach the projector due to excessive distance or obstructions such as walls or cabinet doors, you can connect an external IR repeater to the Remote control input, and position its IR sensor within range of the operator.
- To synchronise the control of multiple projectors, connect the ***Wired Remote Output*** of one projector to the ***Wired Remote Input*** of another.

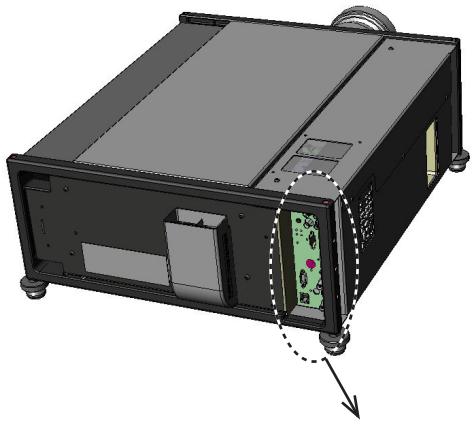
Note that plugging in the remote control cable will disable the infra-red.

RS232

- All of the projector's features can be controlled via a serial connection, using the text strings described in the ***External Control Protocol***..
- Use a null-modem cable to connect directly to a computer, or a straight cable to connect to a modem.

LAN

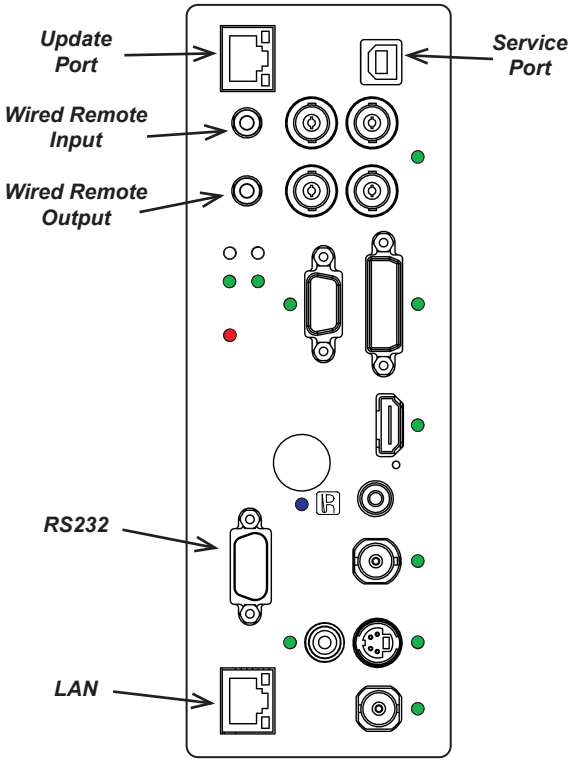
- All of the projector's features can be controlled via a LAN connection, using the text strings described in the ***External Control Protocol***..
- Alternatively, for details of how to use the ***Web Configuration Utility*** to control the projector, see the ***Operating Guide***.
- Use a crossed LAN cable to connect directly to a computer, or an uncrossed cable to connect to a network hub.



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 (RS232 or LAN) should be used at any one time.



Rear Connection Panel

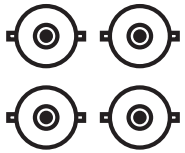
Wiring Details

Signal inputs and outputs

Component input

4 x 75 ohm BNC

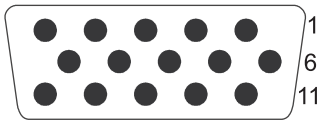
	RGsB	RGBS	YPrPb
Pb/B	B	B	Pb/Cb
Y/G	G + Sync	G	Y
Pr/R	R	R	Pr/Cr
SYNC		Sync	



VGA input

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



pin view of female connector

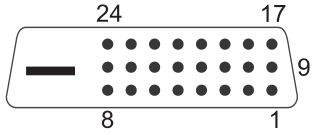
Notes

*For full details of all input settings, see the **Global Settings/Input Configuration menu**, and the **Input Settings Picture menu** in the **Operating Guide**.*

DVI-I input

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-



pin view of female connector

* Hot plug detect (HPD) is fully DVI compliant. DVI sources detect the presence of a display device by providing +5V on pin 14 and looking for +5V on pin 16. Whenever the projector is operational, and 5V is present on pin 14, pin 16 will be held at +5V.

EDID is available even when the projector is switched off.

Operational means that the projector is powered up. Non operational states are powered down and some self test and reprogramming modes.

High Definition Content Protection (HDCP) is supported on this input.

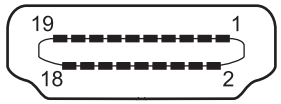
Notes

*For full details of all input settings, see the **Global Settings/Input Configuration menu**, and the **Input Settings Picture menu** in the **Operating Guide**.*

HDMI input

19 way type A connector

1	TMDS Data 2+
2	TMDS Data 2 Shield
3	TMDS Data 2-
4	TMDS Data 1+
5	TMDS Data 1 Shield
6	TMDS Data 1-
7	TMDS Data 0+
8	TMDS Data 0 Shield
9	TMDS Data 0-
10	TMDS Clock+
11	TMDS Clock Shield
12	TMDS Clock-
13	CEC
14	not connected
15	SCL (DDC Clock)
16	SCA (DDC Data)
17	DDC/CEC Ground
18	+5 V Power
19	Hot Plug Detect



pin view of panel connector

SPDIF output

RCA Phono

Digital audio output from the HDMI input stream.

CVBS inputs

CVBS1: 75 ohm BNC

CVBS2: RCA Phono

Notes

*For full details of all input settings, see the **Global Settings/Input Configuration menu**, and the **Input Settings Picture menu** in the **Operating Guide**.*

S-Video input

4 pin mini-DIN

1	Y Ground
2	C Ground
3	Luminance (Y)
4	Chrominance (C)

pin view of female connector

3G-SDI

75 ohm BNC

SMPTE 292 / HD-SDI signals are very high speed digital signals which require better quality coaxial cable than conventional analogue video. The data rate is 1.5 Gigabits per second.

In choosing cable length and connectors for any installation the frequency response loss in decibels should be proportional to √f, from 1MHz, to 1.5GHz. The following or similar cable specification should be used to ensure fault free communication between source and projector:

Belden 8281 cable or equivalent

Notes

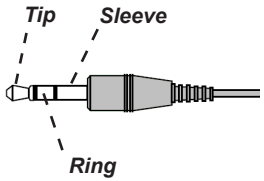
*For full details of all input settings, see the **Global Settings/Input Configuration menu**, and the **Input Settings Picture menu** in the **Operating Guide**.*

Control connections

Wired Remote control connection

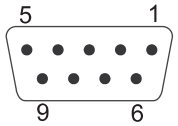
3.5mm mini jack

Tip	Power
Ring	Signal
Sleeve	Ground



Serial control input

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



pin view of female connector

Null-modem cable

(used to connect the projector to a computer)

RX	2	---	3	TX
TX	3	---	2	RX
GND	5	---	5	GND

Serial port settings

Baud rate	9,600 bps
Data length	8 bits
Stop bits	one
Parity	none
Flow control	none

Notes

Note that plugging in the remote control cable will disable the infra-red.

Only one remote connection (RS232 or LAN) should be used at any one time.

The projector is a DTE, so use:

a straight cable to connect to a modem, or

a null-modem cable as shown here to connect to another DTE such as a computer.

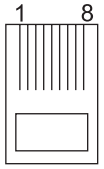
LAN connection

TCP Port number
10001

10BaseT Unshielded Twisted Pair cable

The standard wire colours as as follows:

1	White / Orange stripe
2	Orange
3	White / Green stripe
4	Blue
5	White / Blue stripe
6	Green
7	White / Brown stripe
8	Brown



top view of cable connector (clip is underneath)

Crossed cable

(used to connect directly to a computer with no hub or network.)
(Note that only the green and orange pairs are crossed)

1	White / Orange stripe	White / Green stripe	1
2	Orange	Green	2
3	White / Green stripe	White / Orange stripe	3
4	Blue	Blue	4
5	White / Blue stripe	White / Blue stripe	5
6	Green	Orange	6
7	White / Brown stripe	White / Brown stripe	7
8	Brown	Brown	8

Notes

Only one remote connection (RS232 or LAN) should be used at any one time.

*For full details of all network settings, see **Global Settings/ Network menu**, in the **Operating Guide**.*

Use:

a straight cable to connect to a hub or network, or

a crossed cable as shown here to connect ONLY to a computer directly.

DIGITAL PROJECTION

OPERATING GUIDE

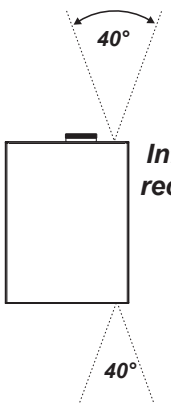
Titan Pro series III

High Brightness Digital Video Projector

Rev A May 2012

CONTENTS

Using the Remote Control and the Control Panel



Infra-red reception

Transmit indicator

Power On/Off

Info
displays information about the current signal

Menu controls

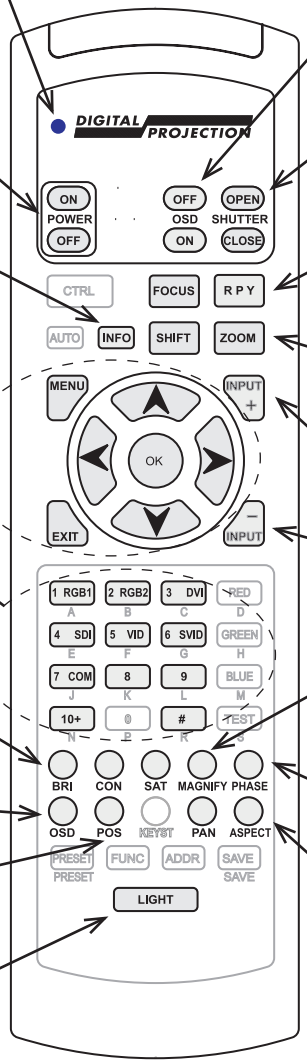
Input selection
1–**10** *selects Inputs 1 to 10*
*selects Dual Pipe (inputs 9+10)*

Image adjustment
Brightness, **Contrast** *and* **Saturation**
use ◀ *and* ▶ *to adjust sliders*

OSD
opens the **OSD** *menu*

Pos
use ◀ *and* ▶ *to adjust H and V sliders*

Remote control backlight On/Off



OSD On/Off
both open the **Messaging** *selection menu*

Shutter Open/Close

(RPY) Lens calibration
See ***Fitting the Lens*** *in the* ***Installation and Quick Start Guide****.*

Lens controls
Press **Focus**, *then* ◀ *and* ▶ *to adjust.*
Press **Zoom** *then* ▲ *and* ▼ *to adjust.*
Press **Shift** *then* ◀, ▶, ▲ *and* ▼ *to adjust.*

Input selection
Press **+** *or* **–** *to scroll through the inputs*

Magnify and Pan
both open the **Pan/Scroll/Zoom** *menu*

Phase (VGA only)
use ◀ *and* ▶ *to adjust slider*

Aspect
opens the **Aspect Ratio** *menu*

Notes

For full details of how to use the menu system, see later in this guide.

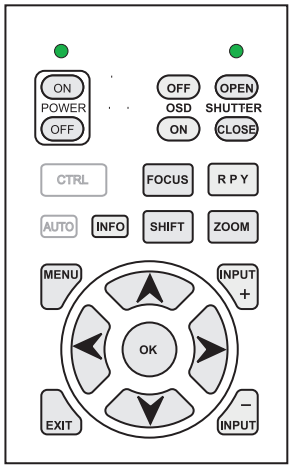
*When you press any of the L***ens control** *buttons, the* **Transmit indicator** *will stay illuminated for 10 seconds, or until you press* **Exit***.*

Each time a lens is fitted to the projector, the calibration procedure must be carried out.

(see the ***Installation and Quick Start Guide****)*

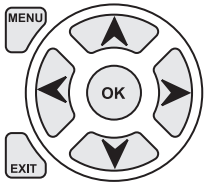
After calibrating the lens, you will need to re-adjust the Zoom and Focus.

Some of the buttons are duplicated on the control panel:



Using the Menus

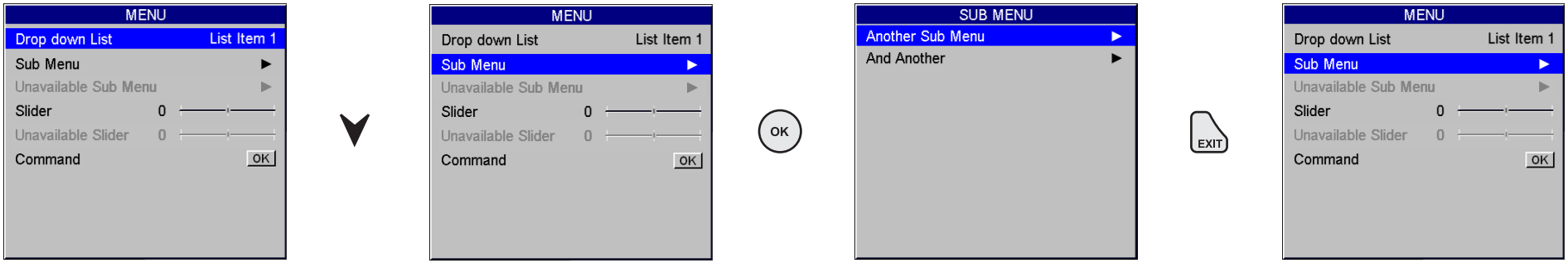
Use the buttons on the projector control panel or on the remote control, to access the menu system.



- To open or close the on-screen display (OSD), press MENU.

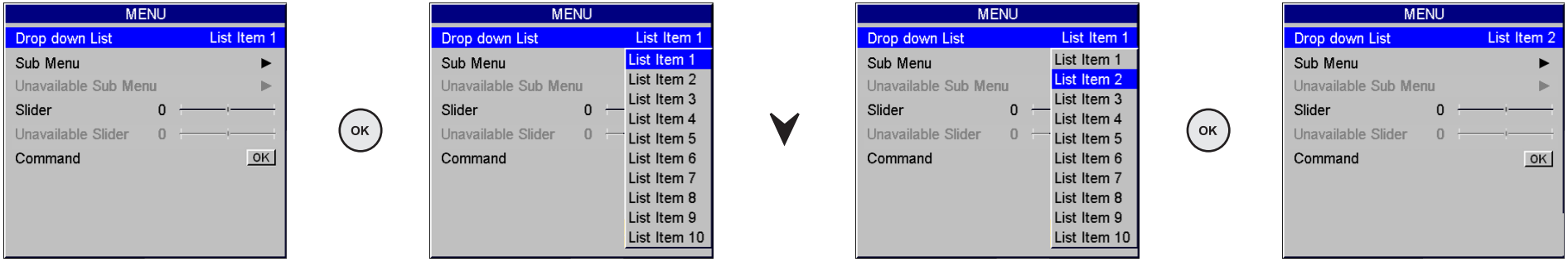
Menus and sub-menus

- To open a sub-menu, select it using ▲ and ▼, then press OK.
- To return to the previous menu, press EXIT.



Drop-down lists

- To use a drop-down list, press OK, select an item using ▲ and ▼, then press OK again or press EXIT to exit without changing.

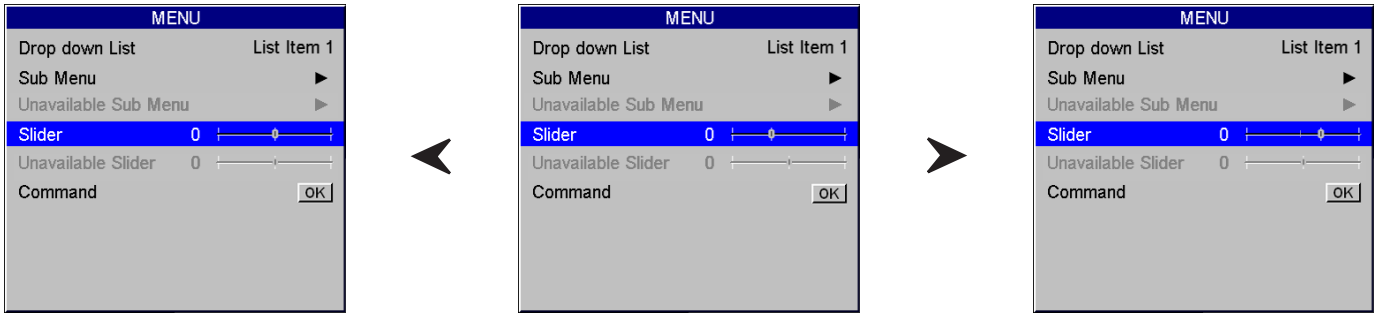


Notes

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

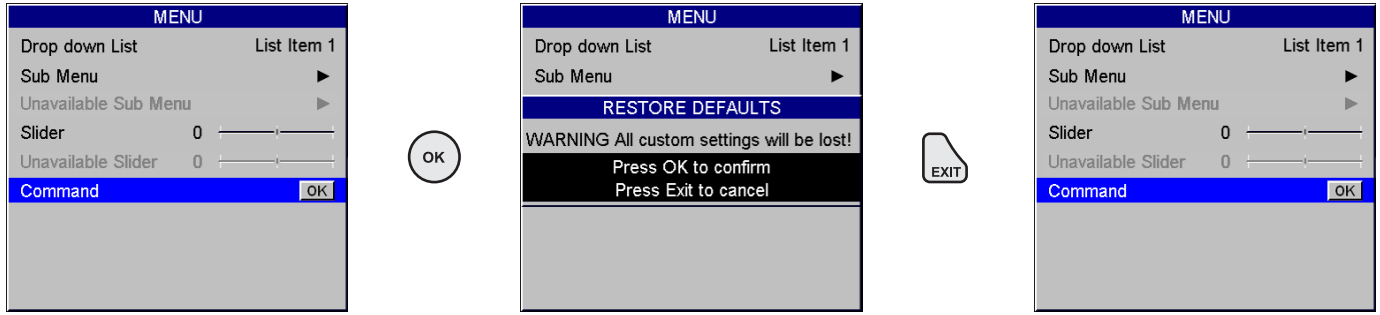
Sliders

- To use a slider, press ◄ and ► to adjust it.



Commands

- To use a command, press OK. In the example below, press OK to confirm, or press EXIT to cancel.



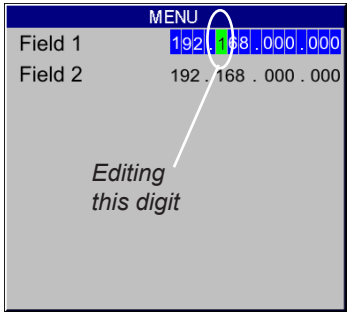
Notes

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

Editing fields

Some features require a text or numeric field to be edited.

- To edit a field, first select it using ▲ and ▼, then press OK.
- Use ◄ and ► to move the green highlight to the digit or character which is to be changed, then use ▲ and ▼, to adjust it.
- Use ◄ and ► to select the next digit or character... etc.
- Press OK to accept the new value, or press EXIT to exit without changing.

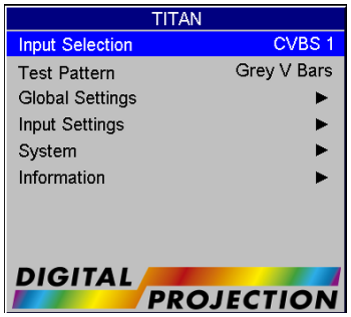


Notes

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

A Tour of the Menus

Main Menu



Input Selection

- Select an input source from the drop-down list.

Test Pattern

- Set **Input Selection** to **Test Pattern**, then select a test pattern from the drop-down list.

Global Settings

Global Settings are those that affect the whole projector, regardless of which input is being used or what kind of image is being displayed.

More information about this menu can be found later in this section.

Input Settings

The Input Settings are those that affect ONLY the input being displayed. When a new input mode (video or graphics standard) is detected, eg NTSC, HDTV 1080p or SVGA, these settings are saved so that they can be recalled next time that input mode is displayed. In some cases the mode may change for the same input. For example, a DVD player connected to the HDMI input could switch between 1080p24 and 1080i60. The projector is able to save and automatically recall different input settings for these different input modes.

More information about this menu can be found later in this section.

System

The System menu allows you to open and close the shutter, and to switch the power off and on.

More information about this menu can be found later in this section.

Information

Information about the projector, the current input source, and about Digital Projection.

More information about this menu can be found later in this section.

Notes

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

Main Menu

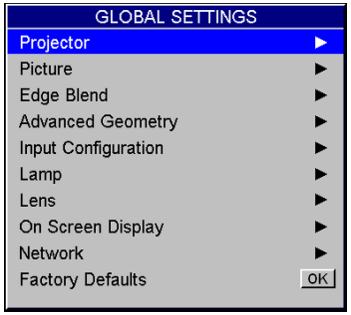
You can also select an input source by pressing 1 *to* 10+ *or* # *(dual pipe) on the remote control.*

*The Test Pattern menu is not available until **Test Pattern** is selected from the **Input Selection** drop-down list.*

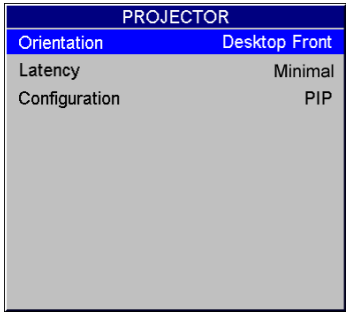
Test Patterns are subject to image controls, so brightness, contrast etc. will affect their appearance on screen.

Global Settings Menu

Global Settings are those that affect the whole projector, regardless of which input is being used or what signal type is being displayed.



Projector



Orientation

- Depending on how the projector is mounted, select the appropriate setting from the drop-down list

Latency

Affects interlaced sources only. For fastest response, the **Minimal** setting gives minimum frame delay. For improved performance with films involving motion sequences, the **Best Video** setting uses adaptive de-interlacing and interpolation, but takes longer to process.

- Select the appropriate setting from the drop-down list.

Configuration

- Select **PIP**, if the projector is to display two images at the same time, using **PIP**, **PAP** or **POP** mode. More information about this feature can be found later in this section.
- Select **PIP**, if this is a lone projector displaying a single image, but make sure that **PIP Option** is turned off.
- Select **Edge Blend** if this projector is part of an array of projectors, each one showing a part of one large image. More information about the Edge Blend feature can be found later in this section.

Notes

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

Main Menu
Global Settings

Main Menu
Global Settings
Projector

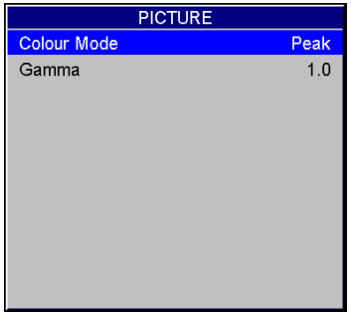
*Note that **Image Orientation** may be reset to its factory default setting by the **Reset** command in the **Picture** menu.*

*Switching from **PIP** to **Edge Blend** will cause a short delay whilst the projector reconfigures. No control will be possible during this period.*

***PIP** and **Edge Blend** are mutually exclusive modes of operation. When in PIP mode, Edge Blend is not available, and vice versa.*

Picture

These settings in the Global Picture Menu affect all images, regardless of which input is being used or what signal type is being displayed.



Colour Mode

- Select one of the preset Colour Modes from the drop-down list.

Gamma

- Select a Gamma setting from the drop-down list.

Notes

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

Main Menu
Global Settings
Picture

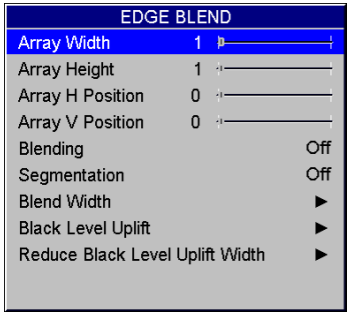
*There are two **Picture** menus – one in the **Global Settings Menu**, and one in the **Input Settings Menu**.*

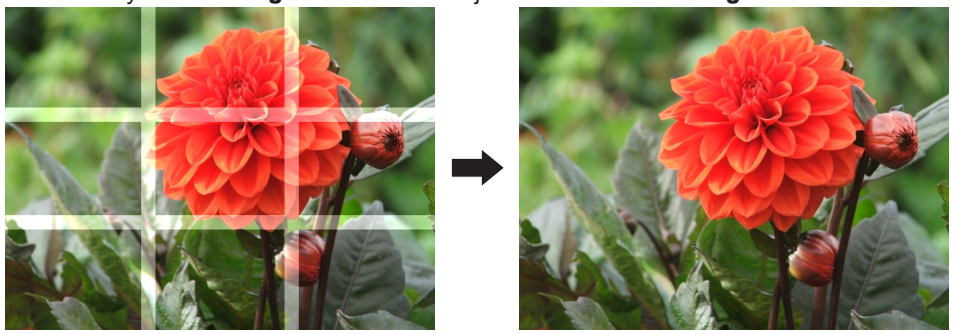
***User Colour Modes 1 & 2** are set using the **Projector Manager** application on an external computer.*

For more Information, contact Digital Projection Ltd, or your dealer.

Edge Blend

When several projectors are used to create a large tiled image, the edges need to be blended to avoid the overlaps appearing brighter than the rest of the image. The Edge Blend menu is available only when **Configuration** in the Projector menu is set to **Edge Blend**.





Array Width and Height

- Set this to the total number of projectors in the array. None of the other options are available until one of these two settings is greater than **1**. The maximum number of projectors is **4** x **4**.

Array H Position and V Position

- These two parameters need to be set correctly for each projector in the array, so that it can determine which edges are to be blended. Sometimes only one edge overlaps, sometimes two, three or four.

Blending

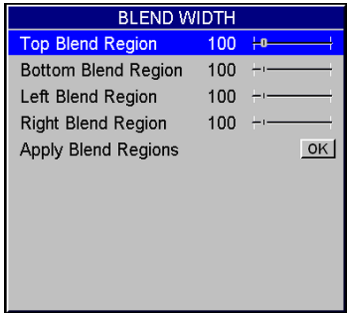
- Set this to **Off** for a lone projector, **On** to enable Edge Blending, or **Align Pattern** to help adjust the physical position of the projectors.

Segmentation

- Set this to **On**, if you want the projector to divide up the image into tiles, or **Off** if you have external equipment to do this.

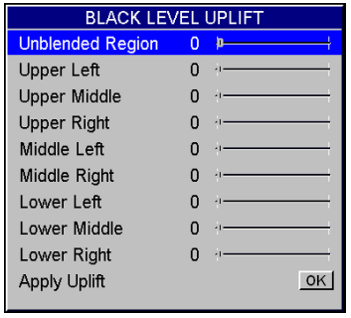
Blend Width

- Use this to set the width of the blended regions.



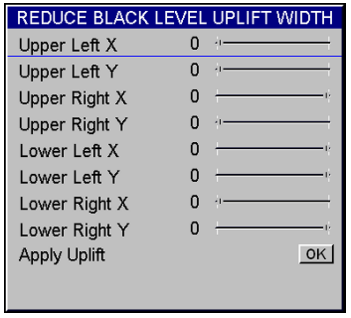
Black Level Uplift

- Use this to correct for non-zero black levels in the blended regions.



Reduce Black Level Uplift Width

- Use this to correct for stray light from the DMD's non-addressable border.



Notes

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

Main Menu
Global Settings
Edge Blend

*This menu is available only when **Configuration** in the Projector menu is set to **Edge Blend**.*

*None of the other blend options are available until either the Width or Height setting is greater than **1**.*

Note that the position numbering starts from zero:

*So the top left projector is at position **H 0, V 0**.*

*The **Blend Width** and **Black Level** settings will not be applied until you select **Apply** and press* OK.

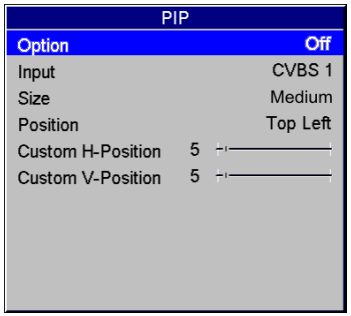
Which settings are available in these menus depends on:

- how many projectors there are in the array

- the position of the projector in the array

PIP

Two images can be combined, in three different ways using this feature. The PIP menu is available only when **Configuration** in the Projector menu is set to **PIP**.



Option

- Select **PIP**, **PAP**, or **POP** mode from the drop-down list.

Input

- Select an **Input** from the drop-down list. The inputs are divided into two groups – the main image must be from one group, and the sub-image must be from the other group.
  - Group A: **CVBS 1, CVBS 2**, **S-VIDEO** and **3G-SDI**
  - Group B: **COMPONENT, VGA**, **DVI**, **HDMI** and **DVI-A**

Size

- Select a size for the sub-image from the drop-down list.

Position

- Select one of the preset positions for the sub-image from the drop-down list.

Custom Position

- If you have chosen Custom from the Position drop-down list, then you can use the sliders to position the image manually.

PIP: Picture In Picture

PAP: Picture And Picture

POP: Picture Opposite Picture

Notes

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

Main Menu
Global Settings
PIP

*This menu is available only when **Configuration** in the Projector menu is set to **PIP**.*

***PIP**, **PAP** and **POP** are NOT possible when **Input** is set to **Test Pattern**.*

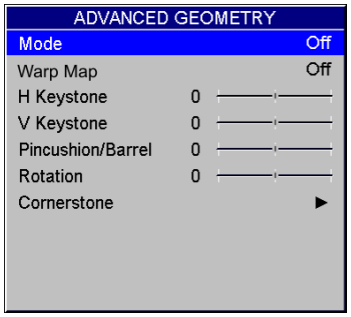
*In these examples, the flower is the main image, and the window is the sub-image, shown at the **Medium** size setting.*

*The two images MUST be from different **Input groups**.*

*The **Position** settings apply ONLY to **PIP** mode. PAP and POP are always as shown in these examples.*

Advanced Geometry

These settings in the Global Menu affect all images, regardless of which input is being used or what signal type is being displayed.



Mode

- Select **Keystone**, **Cornerstone**, **Rotation**, **Warp Map** or **Off** from the **Mode** drop-down list.

Warp

- Using an external Digital Projection computer application, up to eight customised warp maps can be created and uploaded to the projector. If **Warp Mode** is selected, and any warp maps have been uploaded, you can select from the drop-down list.

Horizontal and Vertical Keystone

- If **Keystone Mode** is selected, you can set these two sliders to correct for any distortion caused by the projector being in a different horizontal or vertical plane to the screen.

Pincushion/Barrel

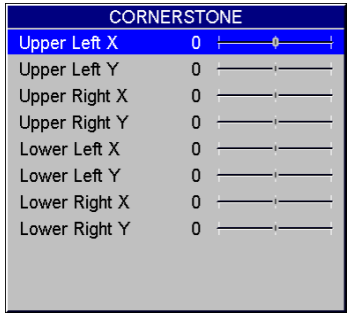
- You can set this slider to correct for any distortion caused by the screen being concave or convex.

Rotation

- If **Rotation Mode** is selected, you can set this slider to rotate the image on the screen.

Cornerstone

- If **Cornerstone Mode** is selected, you can use the sliders to stretch the image from each of the four corners.



Notes

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

Main Menu
Global Settings
Advanced Geometry

*See also **Geometry** in the **Input Settings** menu, later in this guide.*

Which settings are available in these menus depends on:

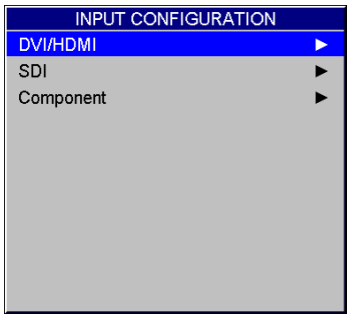
*- which **Mode** is selected in the first drop-down list*

- and the Pincushion/Barrel slider can be used on its own, or in conjunction with Keystone or Rotation, but not with Cornerstone or Warp.

All of these modes may result in some reduction in resolution. If it is possible to correct the image by repositioning the screen or projector, then this is preferable.

Input Configuration

These menus allow adjustment of various technical parameters specific to each of the signal inputs, regardless of which input is being used.



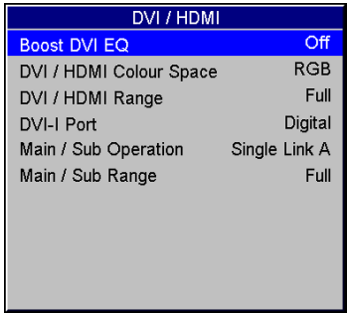
DVI/HDMI

The first four settings apply to the rear inputs:

- **Boost DVI EQ** should normally be set to **Off,** except when you are having problems with a long DVI cable.
- **DVI/HDMI Colour Space** should normally be set to **Auto**, except when the projector has problems identifying the correct colour space.
- **DVI/HDMI Range** should normally be set to **Auto**, except when you are having contrast problems with some DVI sources, when it can be set to either **Full** or **Limited**.
- Set **DVI-I Port** to choose between **Analog** and **Digital**, depending on the input signal.

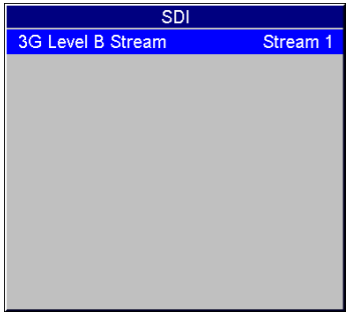
The last two settings apply to the side inputs:

- Set **Main/Sub Operation** to **Single Link A**, **Single Link B** or **Dual Link**, depending on the input signal.
- Set **Main/Sub Range** to **Full** or **Limited**, depending on the input signal.



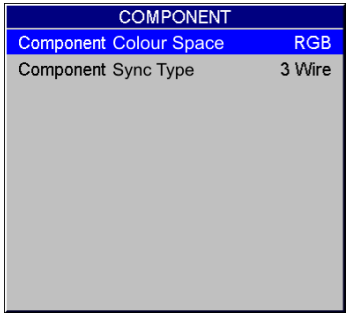
SDI

- If two video streams are being transmitted, use **3G Level B Stream** to choose between the two streams.



Component

- Set **Component Colour Space** to choose between **RGB** and **YPbPr**.
- **Component Sync Type** should be set to **Auto**, except when the projector has problems selecting between **3 Wire** (RGsB) and **4 Wire** (RGBS).



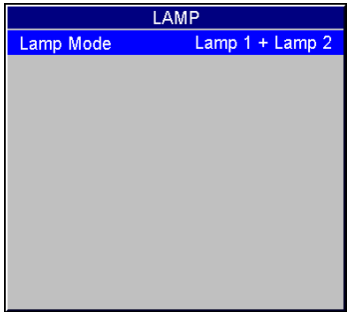
Notes

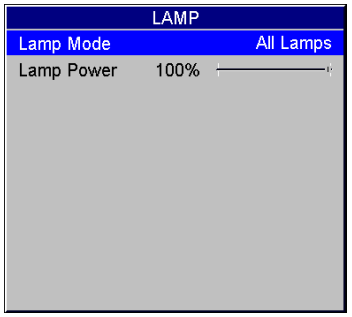
*See also **Using the Menus**, earlier in this guide and **Menu Map**, later in this guide.*

Main Menu
Global Settings
Input Configuration

All these settings will remain as set in this menu, regardless of which input is being used.

Lamp

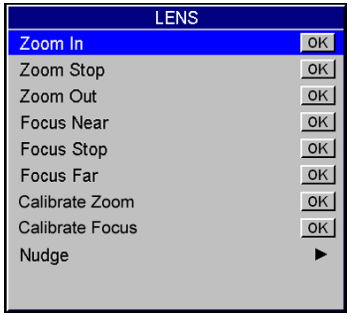




- Use the **Lamp Mode** setting to choose which combination of lamps to use.

  In **Auto** modes, the lamp usage will be spread evenly between all lamps, over time.
- If there is a **Lamp Power** slider, use it to vary the power between 85% and 100%.

Lens



- To move the lens in or out, select **Zoom In** or **Zoom Out**, then press OK.

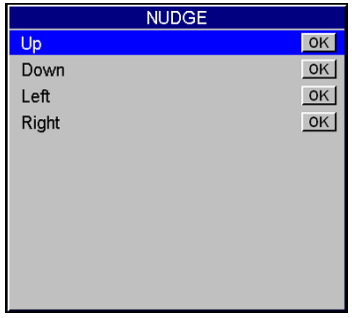
  When the image is the desired size, select **Zoom Stop** then press OK.
- To adjust the focus, select **Focus Near** or **Focus Far**, then press OK.

  When the image is correctly focussed, select **Focus Stop** then press OK.
- To calibrate the lens, select **Calibrate Zoom** or **Calibrate Focus**, then press OK.

  The drive mechanism will travel to both extremes, then stop.

Nudge

- To position the image correctly on the screen, use the **Nudge** controls.



Notes

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

Main Menu
Global Settings
Lamp

*The number of lamps is dependent on the projector model. Single lamp models will have no **Lamp** menu.*

Not all models have a lamp power setting.

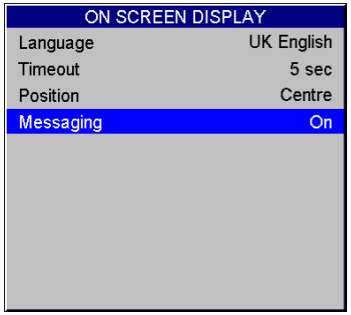
Main Menu
Global Settings
Lens

Each time a lens is fitted to the projector, the calibration procedure must be carried out.

*(Use this menu, or the remote control: see the **Installation and Quick Start Guide**)*

After calibrating the lens, you will need to re-adjust the Zoom and Focus.

On Screen Display



- Select a display **Language** from the drop-down list.
- The menus will disappear if no buttons are pressed within the **Timeout** selected from the drop-down list. If you want the menus to stay on screen permanently, then select **Infinite**.
- Select a **Position** from the drop-down list.
- If you do not want projector status messages to be displayed, for instance: 

, then set **Messaging** to **Off**.

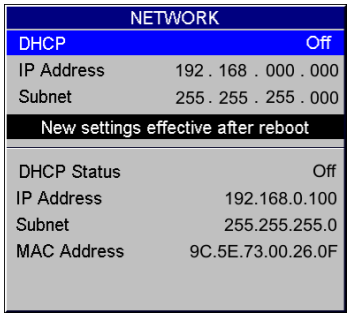
Notes

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

Main Menu
Global Settings
On Screen Display

Network

The fields at the bottom of the menu show the current settings. Any new settings will not be effective until the projector has been turned off, then back on again.



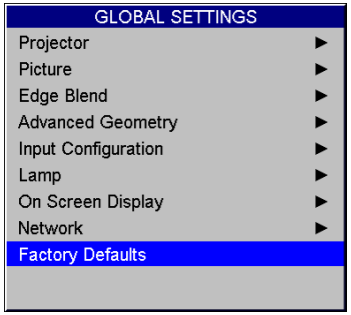
- Set **DHCP** to **On** if the IP Address is to be assigned by a DHCP server, or **Off** if it is to be set here.
- If **DHCP** is set to **On:**

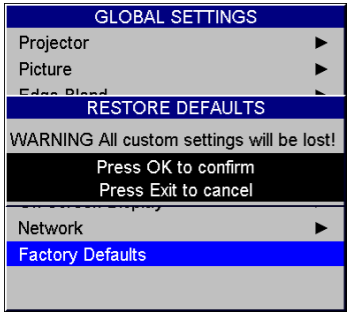
  It will not be possible to edit either IP Address or Subnet.
- If **DHCP** is set to **Off:**

  Edit **IP Address** to the correct value.

  Edit the **Subnet** to the correct value.

Factory Defaults





- Press OK to restore all settings to their factory defaults. When the warning message appears, press OK to confirm, or press EXIT to cancel.

Notes

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

Main Menu
Global Settings
Network

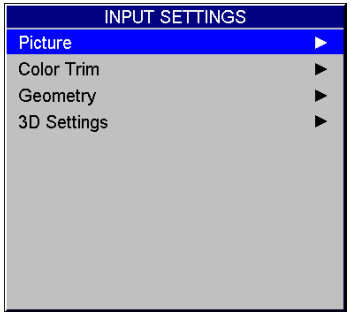
Any new settings will not be effective until the projector has been turned off, then back on again.

Main Menu
Global Settings
Factory Defaults

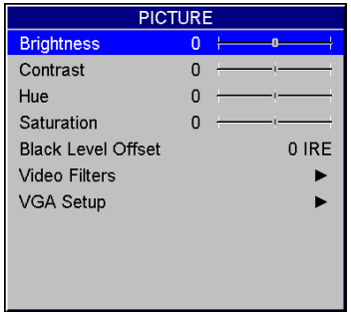
Do NOT do this unless you are sure that you want to restore ALL the current settings to their factory defaults.

Input Settings Menu

The Input Settings are those that affect ONLY the input being displayed. When a new input mode (video or graphics standard) is detected, eg NTSC, HDTV 1080p or SVGA, these settings are saved so that they can be recalled next time that input mode is displayed. In some cases the mode may change for the same input. For example, a DVD player connected to the HDMI input could switch between 1080p24 and 1080i60. The projector is able to save and automatically recall different input settings for these different input modes.



Picture



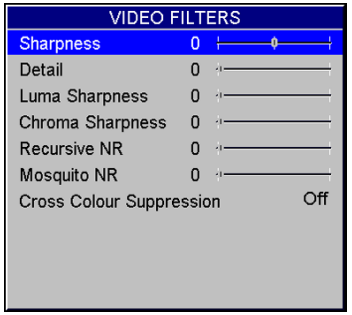
Brightness, Contrast, Gamma, Hue, Saturation

- Set the slider or select from the drop-down list as required, to improve the quality of the image.

You can also press BRI, CON or SAT on the remote control.

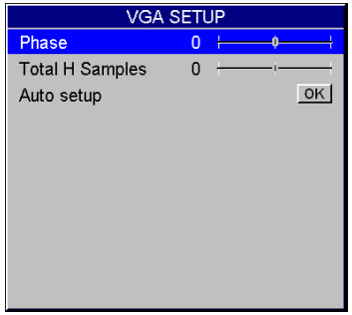
Black Level Offset

- Set this to **0 IRE** or **7 IRE** as required.



Video Filters

- Set the sliders or select from the drop-down list as required, to improve the quality of the image.



VGA Setup

- Set the **Phase** slider to correct for shimmering or poor quality definition on, for example, fine text.
- Set the **Total H Samples** slider to match the resolution of the incoming video signal,

or Use **Auto Setup** to allow the projector to detect the appropriate settings automatically.

Notes

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

Main Menu
Input Settings

*When a new input mode is detected (eg NTSC, HDTV 1080p, SVGA etc), all the **Input Settings** are saved so that they can be recalled next time that input mode is displayed.*

Main Menu
Input Settings
Picture

Main Menu
Input Settings
Picture
Video Filters

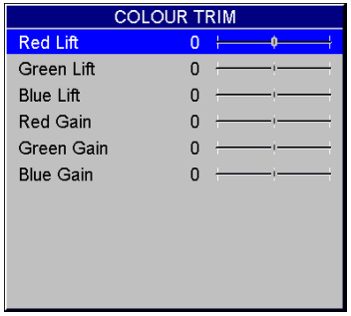
Main Menu
Input Settings
Picture
VGA Setup

*There are two **Picture** menus – one in the **Global Settings Menu**, and one in the **Input Settings Menu**.*

Hue applies only to NTSC signals.

Auto Setup will not function unless a signal is present.

Colour Trim



- Set the sliders as required.

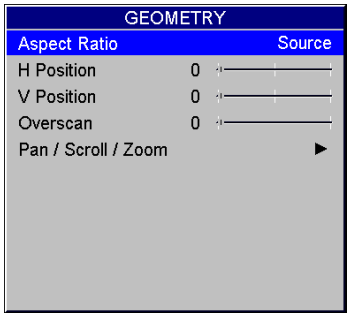
Notes

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

Main Menu
Input Settings
Colour Trim

*When a new input mode is detected (eg NTSC, HDTV 1080p, SVGA etc), all the **Input Settings** are saved so that they can be recalled next time that input mode is displayed.*

Geometry



Source: *fills the DMD height or width whilst maintaining the aspect ratio*

Fill: *stretches the image to fill the DMD*

Fill & Crop: *stretches the image to fill the DMD width, but crops to maintain the aspect ratio*

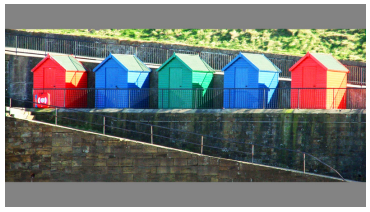
- Set **Aspect Ratio** to choose between **Source, Fill, Fill & Crop**, **Anamorphic** and **Theatrescope.**

Anamorphic: *Some devices (eg certain DVD players) pack a 16:9 image into a 4:3 aspect ratio. In such cases to display the image correctly, choose the Anamorphic aspect ratio.*

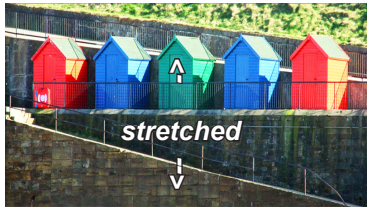
16:9 image packed into a 4:3 box

Anamorphic: *stretched to display the image correctly*

TheatreScope: *The 2.35:1 source image is displayed using the full area of the DMD. This is then stretched to 2.35:1 by the TheatreScope lens.*



2.35:1 image



Theatrescope without lens: *stretched vertically to fill the full area of the DMD*

Theatrescope with lens: *Stretched horizontally to display the image correctly*

Notes

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

Main Menu
Input Settings
Geometry

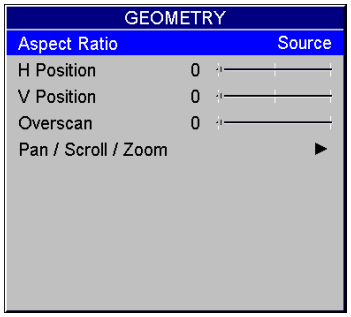
*When a new input mode is detected (eg NTSC, HDTV 1080p, SVGA etc), all the **Input Settings** are saved so that they can be recalled next time that input mode is displayed.*

*See also **Advanced Geometry** in the **Global Settings** menu, earlier in this guide.*

*The **TheatreScope** setting is used to maximise the brightness of a 2.35:1 image, by using the full area of the DMD.*

Use with the TheatreScope Anamorphic System only.

Input Settings Menu, Geometry Submenu *continued*



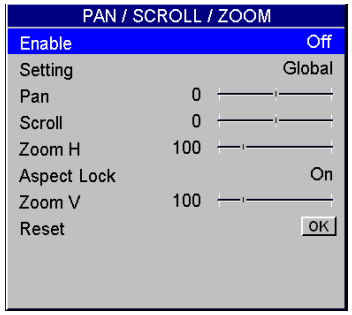
- Set the **H Position** and **V Position** sliders as required.
- Set the **Overscan** slider to compensate for noisy or badly defined image edges.

Pan/Scroll/Zoom

- Set **Enable** to **On** or **Off**.
- Use **Setting** to choose:

  Global, in which case these settings will be applied to all input signals,

or **Per Mode**, in which case these settings will be applied only to the current input signal.



- Set the **Pan**, **Scroll** and **Zoom** sliders as required.
- When **Aspect Lock** is set to **On**, the **Zoom V** slider is disabled.
- Select **Reset** and press (OK) to reset all the sliders to zero.

Notes

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

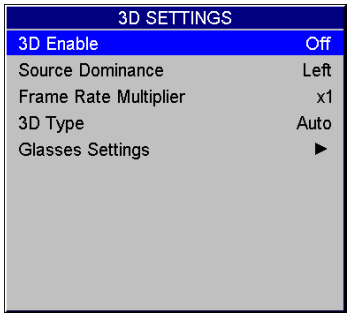
Main Menu
Input Settings
Geometry

*When a new input mode is detected (eg NTSC, HDTV 1080p, SVGA etc), all the **Input Settings** are saved so that they can be recalled next time that input mode is displayed.*

*See also **Advanced Geometry** in the **Global Settings** menu, earlier in this guide.*

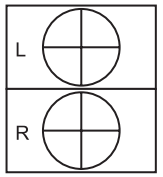
Main Menu
Input Settings
Geometry
Pan/Scroll/Zoom

3D Menu

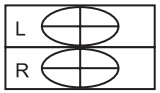


- Set **3D Enable** to **On** or **Off** as required.
- Set **Source Dominance** to **Left** or **Right** to suit the incoming 3D video signal.
- Use the **Frame Rate Multiplier** to reduce flicker when the incoming 3D video signal has a low frame rate.

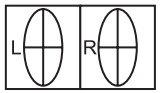
  For example, a 48Hz frame rate could be tripled to 144Hz.
- **3D Type** should be set to **Auto**, except when the projector has problems selecting between **Sequential**, **Frame Packing**, **Top and Bottom** and **Side by Side (Half)**.



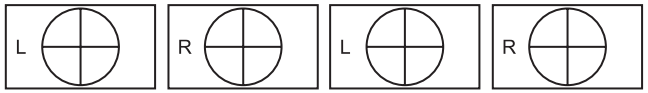
Frame Packing



Top and Bottom

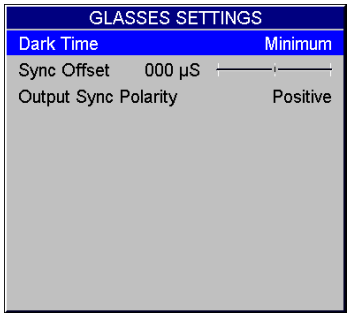


Side by Side (Half)



Sequential

Glasses Settings



- Set the **Dark Time** to reduce the ghosting that can be caused by the images overlapping whilst the glasses are switching.
- Set the **Sync Offset** to compensate for signal processsing delays in the projector.
- Set the **Output Sync Polarity** to suit the glasses, or if the left and right images appear to be swapped.

Notes

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

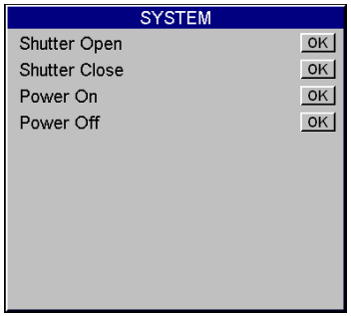
Main Menu
Input Settings
3D

Main Menu
Input Settings
3D
Glasses Settings

*Set the **Dark Time** to the value appropriate to the glasses or Z-screen.*

*Adjust the **Sync Offset** to eliminate ghosting and achieve a smooth greyscale.*

System Menu



- Use the **Shutter Open** and **Shutter Close** commands as required.
- Use the **Power Off** command to set the projector into **Standby** mode.

Notes

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

Main Menu
System

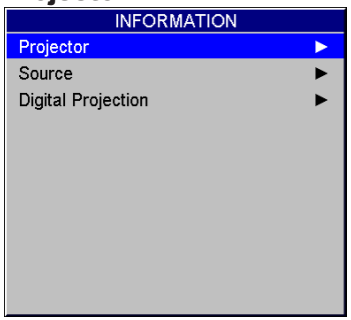
*The **Power On** command has no function when seen on the projector OSD.*

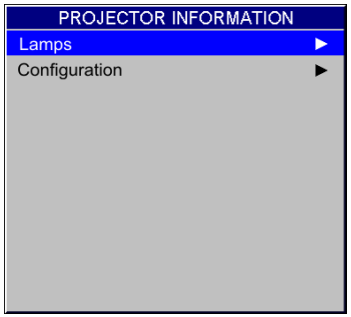
*However, it can be used from the **Web Configuration** application described at the end of this guide.*

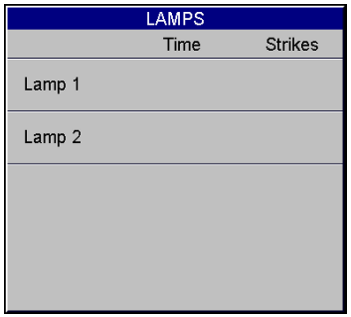
Information Menu

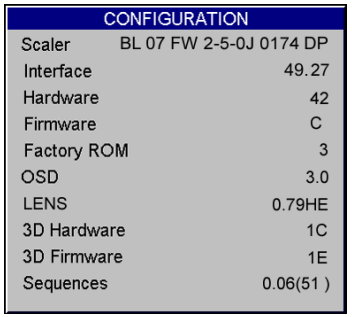
The sub-menus give information about lamp operating times, software and hardware configurations, the input source and Digital Projection.

Projector

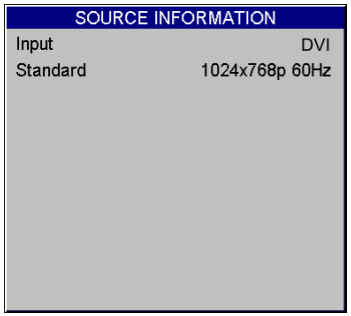








Source



Digital Projection

Notes

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

Main Menu
Information
Projector

The number of lamps is dependent on the projector model.

Main Menu
Information
Source

Main Menu
Information
Digital Projection

Menu Map

Main Menu — ***Sub Menus***

Input Selection

CVBS 1, CVBS 2, S-Video, Component, VGA, 3G-SDI, DVI, HDMI, Test Pattern, Main/DVI, Sub/HDMI, Dual Pipe

Test Pattern

Grey V Bars, Grey H Bars, Aspect Test, Alignment Grid, Warp Adjust, SMPTE, Chequerboard, White Field, Black Field

Global Settings

Projector

- Orientation *Desktop Front, Ceiling Front, Desktop, Rear, Ceiling Rear*
- Latency *Minimal, Best Video*
- Configuration *PIP, Edge Blend*

Picture

- Colour Mode *Peak, HDTV, SDTV, Colour Temperature, User 1, User 2*
- Gamma *1.0 to 2.8*

Edge Blend

- Array Width
- Array Height
- Array H Position
- Array V Position
- Blending *Off, On, Align Pattern*
- Segmentation *Off, On*
- Blend Width *Top, Bottom, Left, Right Blend Region, Apply Blend Regions*
- Black Level Uplift *Unblended Region, Upper Left, Upper Middle, etc, Apply Uplift*
- Reduce Black Level Uplift Width *Upper Left X, Y, Upper Right X, Y, etc, Apply Uplift*

PIP

- Option *Off, PIP, PAP, POP*
- Input *select from Group A or Group B*
- Size *Small, Medium, Large*
- Position *Top Left, Bottom Right etc*
- Custom H Position
- Custom V Position

Notes

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

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

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

The Test Pattern menu is not available until **Test Pattern** *is selected from the* **Input Selection** *drop-down list.*

There are two **Picture** *menus – one in the* **Global Menu**, *and one in the* **Input Settings Menu**.

PIP *and* **Edge Blend** *are mutually exclusive modes of operation. When in PIP mode, Edge Blend is not available, and vice versa.*

Main Menu ***Sub Menus***

Global Settings *(continued)*

Advanced Geometry

Mode *Off, Keystone, Cornerstone, Rotation, Warp*
Warp Map *Off, 1 to 8*
H Keystone
V Keystone
Pincushion/Barrel
Rotation
Cornerstone *Upper Left X, Y, Upper Right X, Y, etc*

Input Configuration

DVI/HDMI *Boost DVI EQ, DVI/HDMI Colour Space, DVI/HDMI Range, DVI Port, Main/Sub Operation, Main/Sub Range*
SDI *3G Level B Stream*
Component *Colour Space, Sync Type*

Lamp

Lamp Mode *Single lamp, Two lamps, Auto*
Lamp Power *85 - 100%*

Lens

Zoom In, Stop, Out, Focus Near, Stop, Far
Calibrate Zoom, Calibrate Focus
Nudge *Up, Down, Left, Right*

On Screen Display

Language *US English, UK English*
Timeout *Number of seconds, Infinite*
Position *Centre, Top Left, Top Right, Bottom Left, Bottom Right*
Messaging *Off, On*

Network

DHCP *Off, On*
IP Address
Subnet
DHCP Status *Information only:*
IP Address
Subnet
MAC Address

Factory Defaults *Projector will ask for confirmation before restoring all settings to factory defaults.*

Notes

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

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

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

The number of lamps is dependent on the projector model. Single lamp models will have no **Lamp** *menu.*

Not all models have a lamp power setting.

Each time a lens is fitted to the projector, the calibration procedure must be carried out.
(Use this menu, or the remote control: see the ***Installation and Quick Start Guide****)*

After calibrating the lens, you will need to re-adjust the Zoom and Focus.

Do NOT do this unless you are sure that you want to restore ALL the current settings to their factory defaults.

Main Menu — ***Sub Menus***

Input Settings

Picture
- Brightness
- Contrast
- Hue
- Saturation
- Black Level Offset *0 IRE*
- Video Filters *Sharpness, Detail, Luma Sharpness, Chrome Sharpness, Recursive Noise Reduction, Mosquito Noise Reduction, Cross Colour Suppression*
- VGA *Phase, Total H Samples, Auto setup*

Colour Trim
- *RGB Lift and Gain*

Geometry
- Aspect Ratio *Source, Fill, Fill & Crop, Anamorphic, TheatreScope*
- H Position
- V Position
- Overscan
- Pan/Scroll/Zoom *Enable, Disable, Global, Per Mode, Pan, Scroll, Zoom H, Aspect Lock, Zoom V, Reset*

3D Settings
- 3D enable *Off, On*
- Source Dominance *Left, Right*
- Frame Multiplier *x1, x2, x3*
- 3D Type *Auto, Sequential, Frame Packing, Top-and-Bottom, Side-by-Side (Half)*
- Glasses Settings *Dark Time, Sync Offset, Output Sync Polarity*

System

Shutter Open, Shutter Close, Power On, Power Off

Information

Projector *Information only:*
- Lamps *Hours, Strikes*
- Configuration *Scaler, Interface, Firmware, OSD, Lens, Hardware*

Source *Information only:*
- Input
- Standard

Digital Projection *Information only: Contact Information*

Notes

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

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

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

There are two **Picture** *menus – one in the* **Global Menu***, and one in the* **Input Settings Menu***.*

Web Configuration Utility

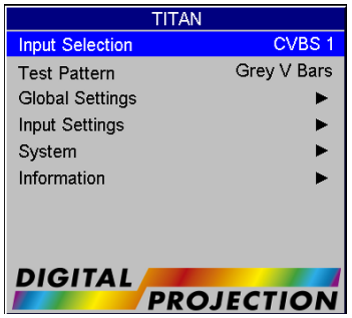
The ***LAN IP Address*** of the projector can be set by using the **Network** submenu, which can be found in the **Global Settings menu**.

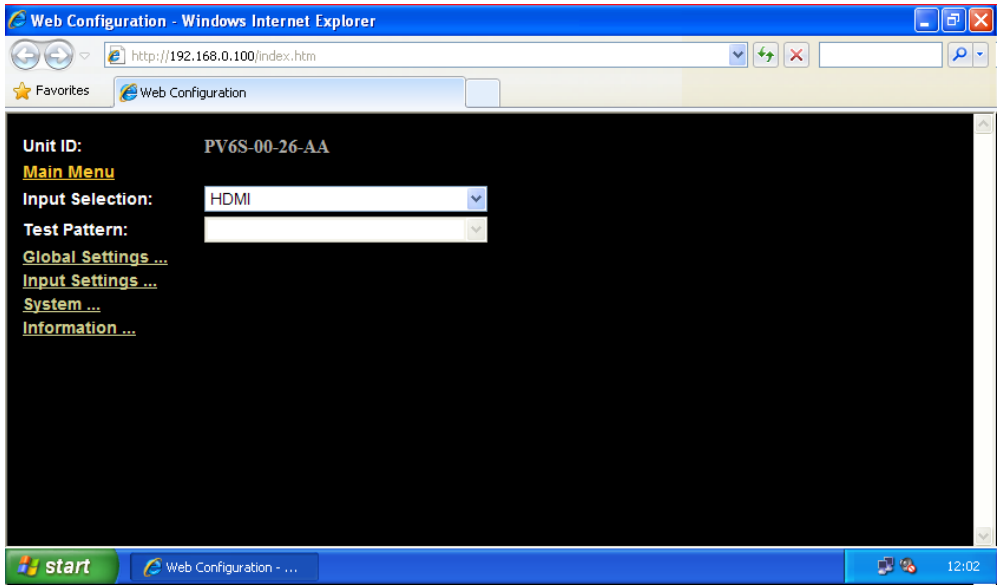
Once the LAN IP Address has been set, it is possible to control all the functions available on the OSD by using the embedded Web Configuration Utility:

- Point your browser at the projector by typing the url ***http://<LAN IP Address>*** into the address bar, then press the ***Enter*** key.
- The embedded webpage shown below right should appear.

Examples

The webpages mirror the OSD menus, as shown in the following examples:

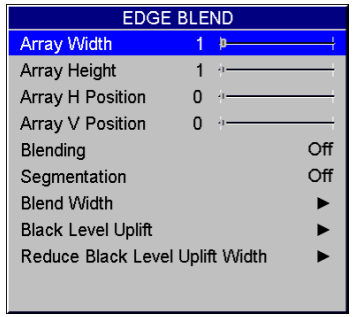




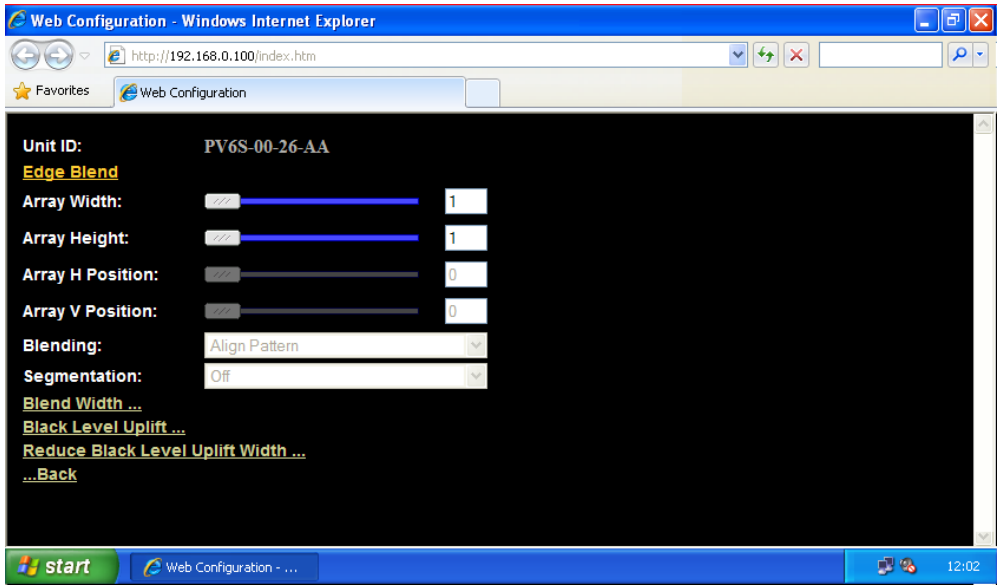
- The last 3 bytes of the projector's ***MAC Address*** are shown in the **Unit ID**, ***00-26-AA*** in the example shown here.
- The menu name is shown in orange, underlined text, as in the **Main Menu** shown here.
- Drop-down lists are represented by similar drop-down lists, as in the **Input Selection** list shown here.
- Sub-menus are represented by yellow underlined links, as in the **Global Settings** sub-menu shown here.

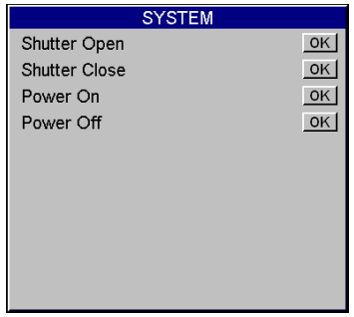
Notes

For full details of how to use the menu system, see earlier in this Guide.

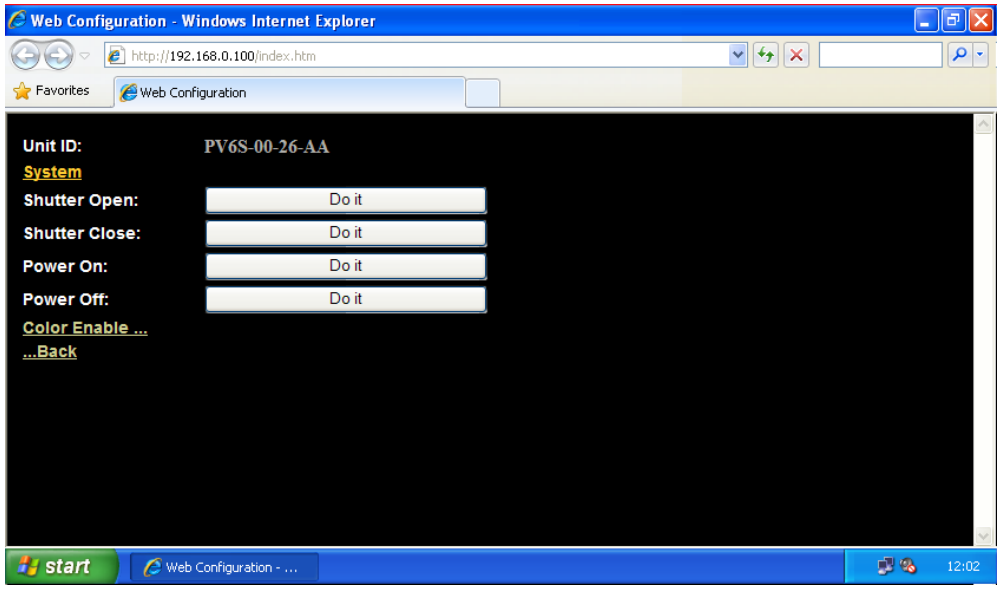


- Sliders are represented by similar sliders, as in the **Array Width** slider shown here.
- Items that are not available are shown greyed-out, as in the **Array H Position** slider and **Blending** list shown here.
- To return from a sub-menu to the previous menu, click on the **Back** link at the bottom of the menu.





- Commands are represented by **Do it** buttons, as in the **Shutter Open** command shown here.



Notes

For full details of how to use the menu system, see earlier in this Guide.