DIGITAL /**PROJECTION**

TITAN LASER SERIES
DIGITAL PROJECTORS

THE VISIONARIES CHOICE

Titan 41000 4K-UHD (Preliminary)

41,000 ISO / 36,000 ANSI @ 4K-UHD. 45,000 ISO / 42,000 ANSI @ WUXGA Lumens | Contrast Ratio: 18,000:1 (Dynamic Black) / 2,000:1 Native | Part Number: 121-654

Key Specifications:

Colour System:	Laser Phosphor with ColorBoost+Red Laser
Display Type:	3 x 0.96" WUXGA DMD™
DMD Specification:	Display capability up to 4K-UHD 8.3 megapixels on screen at 4K-UHD Fast transit pixels for smooth greyscale and improved contrast. Display capability up to 4K-UHD (3840x2160)
Aspect Ratio:	16:9
Fill Factor	N/A as Smooth Picture DMD
Key Features:	**Video & Graphics Processing** • HDMI 2.0 compliance for Side by Side, Frame Packing, Frame Sequential and TopBottom 3D Formats. • DisplayPort 1.2 with HDCP 2.2 compliance. • 10-bit colour processing (30-bits per pixel). • Support for 1080p 24Hz native display. • Support for 4K 4096 x 2160 resolution. • HDR support • Input source automatically detected. • Input redundancy mode with auto switching. • Dual Pipe Processing: Two sources in parallel for Left and Right eyes.

- Syncronisation of active 3D glasses or polarising switcher.
- DICOM simulation mode.
- Sealed light engine

General Features

- Constant Brightness control
- Multi Projector brightness and colour control.
- Compatible with selected 3rd party lenses via lens converter
- Selectable EDID
- Custom Start-up Logo
- Smear Reduction (fast frame) (2D Only)
- Electronic PIC MUTE with selectable fade in/out timers
- On board 4 -line LCD display for at a glance status

Geometry Correction

- Vertical & Horizontal Keystone correction.
- Four Corner adjustment.
- Rotation.
- Pin/Barrel.
- Wall Corner adjustment.
- Centre Shift (Horizontal and Vertical linearity adjustment).
- Custom Warp.
- Upload of maps for warp, blend, uniformity and masking.
- Selectable aspect ratios: 5:4 / 4:3 / 16:10 /16:9 / 1.88 / 2.35 / TheaterScope / Source / Unscaled.
- Digital Zoom.
- Blanking control for custom input window sizing.

Edge Blending

- Blending control available for all sides with width control.
- Correction for non-active pixels at the edge of the display.
- Electronic Black Level Compensation.
- Upload of Blend Maps including Blend, Uniformity, Masking, Pixel by Pixel

HDBaseT® Interface

- Built in support for reception of uncompressed High Definition Video over standard CAT5e/6 LAN cable
- Allows projector to be placed up to 100m from source with low cost cabling
- Supports up to 4K 4096 x 2160@60Hz 4:2:0 or 4K 4096 x 2160@30Hz 4:2:2
- Includes Ethernet 100BaseT and RS232/IR control.

Colour Processing

- Four colour modes available
- Powerful seven point colour correction for accurate colour matching with presets.
- Easy colour temperature selection
- Manual seven point colour adjustment
- Traditional lifts and gains

Projector Controller Software

- Intuitive user interface for network control
- Simultaneous control of user-defined groups of projectors
- At-a-glance monitoring of projector status

Projector Automation

	• Real-time clock provides daily on/off automation • E-mail alerts for system status **Installation** • 4 x eye bolts fitted for easy rigging. • 4 x top stacking mounts and mount securing pins supplied as standard accessories.
Source Compatibility	2D Graphics standards up to 4K-UHD 3840x2160 resolution at 60Hz via HDMI 2.0b, HDBaseT (4:2:0), DisplayPort inputs 3D Graphics standards up to dual-pipe WUXGA 60Hz for input (120Hz output) via HDMI 2.0 and Display Port inputs 12G-SDI is SMPTE 259M, 292M, 424M and ST-2082 compliant. **WUXGA mode** 2D sources up to WUXGA 60Hz and 4K-UHD 60Hz can be displayed scaled to fit WUXGA 3D sources up to WUXGA 60Hz Input -120Hz output can be displayed scaled to fit WUXGA **4K-UHD mode** 2D sources up to 4K (4096 x 2160) will be displayed scaled to fit 4K-UHD **Auto Mode** Sources greater than WUXGA will be displayed scaled to fit 4K-UHD
Inputs/Outputs	**Video & Computer** 	Type	Connector	Qty
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DisplayPort 1.2a (2D)	DisplayPort	2
HDMI 2.0b	HDMI	2
12G-SDI in	BNC	1
12G-SDI out	BNC	1
HDBaseT/LAN	RJ45	1 | . **Communication & Control** | Type	Connector	Qty
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3D SYNC IN	BNC	1
3D Sync Out	BNC	1
LAN	RJ45	1
RS-232	9-pin D-Sub	1
Wired Remote	3.5mm Stereo Jack	1
12V Trigger	3.5mm Stereo Jack	1
3D Sync IR Out	BNC	1
USB 5V 2A	Type A	1	
3D Formats Supported	Sequential / 1080P/WUXGA @100Hz Sequential / 1080P/WUXGA @120Hz Dual-Pipe / 101080P/WUXGA80p @ 50Hz per eye Dual-Pipe / 1080P/WUXGA @ 60Hz per eye Also supports mandatory formats including side by side, top/bottom and frame packing
HDTV Formats Supported	1080p (23.98Hz, 24Hz, 25Hz, 29.97Hz, 30Hz, 50Hz, 59.94Hz, 60Hz). 1080i (50Hz, 59.94Hz, 60Hz). 720p (50Hz, 59.94Hz, 60Hz). 4K-UHD (23.97Hz, 24Hz, 25Hz, 29.97Hz, 30Hz, 50Hz, 60Hz).
Computer Compatibility	**2D** 4K-UHD up to 60Hz

	3D Supported Formats will be displayed up to WUXGA
Bandwidth	18Gb/s (600MHz clock rate) on HDMI
Remote Control	Addressable IR remote Control, Wireless and wired. On-Board keypad
Automation Control	LAN RS-232 Alert E-Mails from Projector Served webpage OSD functions for full Projector Control via web browser LAN Control-Crestron Roomview™ LAN Control-Crestron eControl LAN Control-PJ Link compatible LAN Control-AMX SSDP LAN to RS232 (RS232 by Telnet) Concurrence Control for RS232/LAN DMX Art-Net control Scheduled On and Off times
Colour Temperature	3200K to 9300K
Operation	
illumination Type	Laser Light Source
Typical illumination Life	20,000 Hours (Normal Mode) 40,000 Hours (ECO Mode)

Lenses

Lens	Part No.	Optimised Focus Range*	Lens Shift (Frame)
0.37:1 (Right Angled)	120-510	1.6m - 4.9m	Vert: 0.65 (U) 0.65 (D) frame, Hor: 0.31 (L) 0.31 (R) frame
0.65-0.85:1 (Right Angled)	120-511	2.8m - 8.4m	Vert: 0.62 (U) 0.62 (D) frame, Hor: 0.25 (L) 0.25 (R) frame
0.8-1.16:1 (Includes support bracket)	120-827	1.7m - 11m	Vert: 0.51 (U) 0.51 (D) frame, Hor: 0.20 (L) 0.20 (R) frame
1.16 - 1.49:1 zoom HB	109-236	3m - 15m	Vert: 0.50 (U) 0.408 (D) frame, Hor: 0.2 (L) 0.2 (R) frame
1.39 - 1.87:1 zoom HB	105-610	4m - 24m	Vert: 0.65 (U) 0.65 (D) frame, Hor: 0.28 (L) 0.28 (R) frame
1.87 - 2.56:1 zoom HB	105-611	4m - 24m	Vert: 0.65 (U) 0.65 (D) frame, Hor: 0.28 (L) 0.28 (R) frame
2.56 - 4.16:1 zoom HB	105-612	9.1m - 45m	Vert: 0.65 (U) 0.65 (D) frame, Hor: 0.28 (L) 0.28 (R) frame
4.16 - 6.96:1 zoom HB	105-613	12m - 80m	Vert: 0.65 (U) 0.65 (D) frame, Hor: 0.28 (L) 0.28 (R) frame
6.92 - 10.36:1 zoom	109-235	12m - 80m	Vert: 0.65 (U) 0.45

	HB			(D) frame, Hor: 0.28 (L) 0.28 (R) frame

* Lens focal ranges above are the optimised distances but are likely to focus further, please contact your RSM for more details. Lens ratio tolerances: E-Vision Series: +/-3%. HighLite Series: +/- 5%. M-Vision Series: +/- 2%. Titan Series: +/-2%, INSIGHT Series: +/-2%,

Lens Mount	Motorised Shift, Zoom and Focus. Intelligent Lens Memory with 10 user-definable pre-set positions for zoom lenses.
Mechanical Mounting	Front/Rear Table Front/Rear Ceiling Adjustable Front/Rear Feet
Orientation	**Table Top or Inverted:** Yes **Pointing Up:** Yes **Pointing Down:** Yes **Roll (Portrait):** Yes
Power Requirements	110V~130Vac/ 50~60Hz 180V~240Vac/ 50~60Hz single phase * Note that in 120V operation, the projector will be at 25% brightness TBC
Power Consumption	230V Typical: 3650W , Maximum 4000W 110V Maximum: 1080W (TBC)
Thermal Dissipation	Max 14160.38 BTU/hr @ 200VAC Max 3685 BTU/hr @ 110VAC
Fan Noise	Max 54 dBA Eco Typ : 53 dBA (TBC)
Operating/Storage Temperature:	Operating: Full Power 0°C ~ 35°C (32°F ~95°F), ECO upto 40°C (104°F) Storage: -20°C ~ 60°C (-4°F ~ 140°F)
Operating Humidity	Operating: 10% ~ 90% non-condensing Storage: 10% ~ 90% non-condensing
Weight	88 (without lens) kg / 194 (without lens) lbs
Dimensions	L: 840mm, W: 650mm, H: 381mm (Excl handles) L: 33.1in, W: 25.6in, H: 15in (Excl handles) * See drawings for full details
Safety & EMC Regulations	TBC
Accessories	<table><tr><td>Accessory</td><td>Part No.</td></tr><tr><td>Infrared Remote Control (Replacement) Optional lens mount insert for selected third party lenses (Contact local sales representative for further information)</td><td>118-678 119-729</td></tr></table> *Dimensions included for reference only and are subject to change. Please download the full set of CAD files for this display for more accurate information.*
Downloads	PDF CAD Drawings AUTOCAD Drawings STEP / IGS Drawings
User Guide	

DIGITAL PROJECTION, LTD

Unit 3, Aniseed Park, Broadgate, Oldham, UK OL9 9XA

T: +44 (0)161 947 3300

www.digitalprojection.com

DIGITAL PROJECTION, INC

55 Chastain Road, Suite 115 Kennesaw, GA. 30144

T: 770.420.1350 | F: 770.420.1360

www.digitalprojection.com

DIGITAL PROJECTION, CHINA

Rm A2301, Shaoyaoju 101 North Lane, Shi Ao International Center, Chaoyang District, Beijing 100029, PR China

T: +86.10.58239771 | F: +86 10 58239770

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