Titan LED WUXGA 3D

2,000° Lumens | Contrast Ratio: 2,000:1 | Part No:114-462

TITAN 3-CHIP LED SERIES
DIGITAL PROJECTORS

THE VISIONARIES CHOICE

Colour System: 3-chip DLP®
DMD Specification: 1920 x 1200 pixels native display, Fast transit pixels for smooth greyscale and improved contrast.

Display Type: 3 x 0.96" DarkChip™ DMD™
Aspect Ratio: 16x10
Fill Factor: 87%

Key Features
- Digital Projection has developed a variant of its Titan projector that incorporates the latest LED illumination technology to provide amazing quality images.
- These LEDs remain stable and consistent over many years of use, providing a colour gamut that goes way beyond the requirements of HDTV or cinema.
- The stability of the colour and luminance is of particular value in multi-projector installations. The very high frame rate, low latency capabilities are perfectly suited to simulation.
- Coupled with Digital Projection’s advanced video processing technology, the new light sources provide the ideal reference quality display for home theatre, post production, visualisation and simulation installations.
- *Takes into account Helmholtz-Kohlrausch effect. LED illuminated projectors produce extraordinarily high colour purity and saturation, thus appearing brighter than a lamp-based display with similar measured lumen specifications.

Standard Inputs (1-8): Front End Video Capabilities

Video & Graphics Processing
- High bandwidth digital & analog receiver with 10 bit A-D.
- Automatic detection of interlaced video and implementation of 3:2 or 2:2 extraction as appropriate, with pixel based, motion adaptive interpolation and auto cadence correction.
- Displayed image frame locked to input with as low as 1 frame total latency.
- 24p and 1080p native display.
- Image enhancement for MPEG, Mosquito noise & color transients in composite sources.

Geometry Correction
- Cornerstone, Vertical & Horizontal Keystone, Pincushion & Barrel, and Image Rotation.
- Non-linear Warp adjustment by moving points on an interpolated grid.

Edge Blending
- Semi-automated multi projector tiling
- Correction for non-active pixels at the edge of the display.

Super Image Clarity
- Geometry correction and Edge Blending implemented in single stage process, retaining maximum image resolution.

Picture in Picture
- Two sources can be displayed either one within the other (PIP), or side by side, with original aspect ratios maintained.

ColorMax™
- Accurate matching of projectors in tiled or blended applications.
- User selection and storage of primary and secondary color targets.

High Bandwidth Inputs (9-11): Bypassing Front End for Minimal Latency
- Pixel mapped to the display.
- Dual Link DVI accepts frame rates up to 160Hz with latency as low as 1 frame.
- HDMI 1.4 for Side by Side, Frame Packing & Top Bottom formats.
- Dual Flash Processing can be used to multiply the displayed frame rate for 3D sources (example 144Hz display).
- FastFrame™ Smear Reduction.
- Dual Pipe processing: two sources in parallel for left and right eyes.
- Synchronisation of active glasses or polarising switcher.

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

Source Compatibility:
3GSDI is SMPTE 292M, SMPTE 259M-C and SMPTE 424M compliant.
HDMI and DVI include Deep Color™ processing up to 36 bit.
DVI inputs are HDMI compatible.
Digital Audio Extraction via SPDIF for HDMI sources.
Graphics standards up to 1920 x 1200 at 60Hz via DVI or VGA.
Component Video (SD and HD) via YPrPb, RGB or RGBS.
S-Video (PAL, NTSC & SECAM)
Composite Video (PAL, NTSC & SECAM)

High Bandwidth, Pixel Mapped Path:
Dual DVI accepts graphics standards up to 1920 x 1200 at 120Hz.
HDMI 1.4 including 3D Standards
Dual Pipe (2 x DVI)

Inputs/Outputs

<table>
<thead>
<tr>
<th>Video &amp; Computer</th>
<th>Connector</th>
<th>Qty</th>
<th>Communication &amp; Control</th>
<th>Connector</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>DVI-D / DVI-A</td>
<td>DVI-I</td>
<td>1</td>
<td>3D Sync Out</td>
<td>BNC</td>
<td>1</td>
</tr>
<tr>
<td>HDMI 1.3</td>
<td>HDMI</td>
<td>1</td>
<td>3D Sync In</td>
<td>BNC</td>
<td>1</td>
</tr>
<tr>
<td>3G-SDI</td>
<td>BNC</td>
<td>1</td>
<td>LAN</td>
<td>RJ45</td>
<td>1</td>
</tr>
<tr>
<td>VGA / Analog RGB</td>
<td>15-pin D-Sub</td>
<td>1</td>
<td>RS232</td>
<td>9-pin D Sub</td>
<td>1</td>
</tr>
<tr>
<td>Component Video</td>
<td>4 x BNC</td>
<td>1</td>
<td>Wired Remote In</td>
<td>3.5mm Stereo Jack</td>
<td>1</td>
</tr>
<tr>
<td>S-Video</td>
<td>4-pin Mini DIN</td>
<td>1</td>
<td>Wired Remote Out</td>
<td>3.5mm Stereo Jack</td>
<td>1</td>
</tr>
<tr>
<td>Composite Video</td>
<td>RCA</td>
<td>1</td>
<td>Update Port</td>
<td>RJ45</td>
<td>1</td>
</tr>
<tr>
<td>Composite Video</td>
<td>BNC</td>
<td>1</td>
<td>Service Port</td>
<td>USB Type B</td>
<td>1</td>
</tr>
<tr>
<td>Main - Dual Link DVI-D</td>
<td>DVI-I</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub - HDMI 1.4</td>
<td>DVI-I</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio</td>
<td>RCA</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3D Formats Supported
- Frame Packing
- Dual Pipe
- Frame Sequential
- Side By Side (half)
- Top and Bottom

HDTV Formats Supported
- 1080p (23.98Hz, 24Hz, 25Hz, 29.97Hz, 30Hz, 50Hz, 59.94Hz, 60Hz), 1080i (50Hz, 59.94Hz, 60Hz), 1080sf (23.98Hz, 24Hz), 720p (50Hz, 59.94Hz, 60Hz)

Computer Compatibility
- Up to 1920 x 1200

Bandwidth
- 170 MHz on analog RGB
- 165 Megapixels per second on HDMI and DVI
- 297 Megapixels per second on Dual Link DVI
Remote Control
Addressable IR remote control, wireless and wired with loop-through.
On-Board invertable keypad

 Automation Control
RS232
LAN

Colour Temperature
User selectable from 3200 to 9000K

Lamp Type
LED Illumination Module
Typical Lamp Life
60,000 hours

Lenses

<table>
<thead>
<tr>
<th>Lens</th>
<th>Part No.</th>
<th>Focus Range</th>
<th>Lens Shift</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.37:1 (Right Angled)</td>
<td>120-510</td>
<td>1.6m - 4.9m</td>
<td>Vert: 0.6 (U) 0.6 (D) frame, Hor: 0.3 (L) 0.3 (R) frame</td>
</tr>
<tr>
<td>0.65 - 0.85:1 (Right Angled)</td>
<td>120-511</td>
<td>2.8m - 8.4m</td>
<td>Vert: 0.5 (U) 0.5 (D) frame, Hor: 0.2 (L) 0.2 (R) frame</td>
</tr>
<tr>
<td>0.81 - 1.6:1 (Includes support bracket)</td>
<td>120-827</td>
<td>1.7m - 11m</td>
<td>Vert: 0.4 (U) 0.4 (D) frame, Hor: 0.19 (L) 0.19 (R) frame</td>
</tr>
<tr>
<td>0.67:1 fixed HB</td>
<td>105-607</td>
<td>1.1m - 10m</td>
<td>Vert: 0.108 (U) 0.108 (D) frame, Hor: 0.044 (L) 0.044 (R) frame</td>
</tr>
<tr>
<td>1.12:1 fixed HB</td>
<td>105-608</td>
<td>3m - 15m</td>
<td>Vert: 0.567 (U) 0.45 (D) frame, Hor: 0.188 (L) 0.188 (R) frame</td>
</tr>
<tr>
<td>1.16 - 1.49:1 zoom HB</td>
<td>109-236</td>
<td>3m - 15m</td>
<td>Vert: 0.408 (U) 0.408 (D) frame, Hor: 0.188 (L) 0.188 (R) frame</td>
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<tr>
<td>1.39 - 1.87:1 zoom HB</td>
<td>105-610</td>
<td>4m - 24m</td>
<td>Vert: 0.567 (U) 0.45 (D) frame, Hor: 0.188 (L) 0.188 (R) frame</td>
</tr>
<tr>
<td>1.87 - 2.56:1 zoom HB</td>
<td>105-611</td>
<td>4m - 24m</td>
<td>Vert: 0.567 (U) 0.45 (D) frame, Hor: 0.188 (L) 0.188 (R) frame</td>
</tr>
<tr>
<td>2.56 - 4.16:1 zoom HB</td>
<td>105-612</td>
<td>3.1m - 45m</td>
<td>Vert: 0.567 (U) 0.45 (D) frame, Hor: 0.188 (L) 0.188 (R) frame</td>
</tr>
<tr>
<td>4.16 - 6.96:1 zoom HB</td>
<td>105-613</td>
<td>12m - 80m</td>
<td>Vert: 0.567 (U) 0.45 (D) frame, Hor: 0.188 (L) 0.188 (R) frame</td>
</tr>
<tr>
<td>6.92 - 10.36:1 zoom HB</td>
<td>109-235</td>
<td>12m - 80m</td>
<td>Vert: 0.567 (U) 0.45 (D) frame, Hor: 0.188 (L) 0.188 (R) frame</td>
</tr>
</tbody>
</table>

* 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 and programmable shift, zoom and focus. Intelligent Lens Memory with 5 user-definable preset positions.

Mechanical Mounting

<table>
<thead>
<tr>
<th>Orientation</th>
<th>Front/Rear Table</th>
<th>Front/Rear Ceiling</th>
<th>Adjustable Front/Rear Feet</th>
<th>Rugged, staging tolerant chassis with integrated handles</th>
<th>Optional RapidRig™ frame with integrated pitch, roll and yaw adjustments.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation</td>
<td>Table Top or Inverted: Yes</td>
<td>Pointing Up: Yes</td>
<td>Pointing Down: Yes</td>
<td>Roll (Portrait): Yes</td>
<td></td>
</tr>
</tbody>
</table>

Power Requirements

<table>
<thead>
<tr>
<th>Power Consumption</th>
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</tr>
</thead>
<tbody>
<tr>
<td>100-240VAC 50/60Hz single phase</td>
<td>400W</td>
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</tbody>
</table>

Thermal Dissipation

<table>
<thead>
<tr>
<th>Fan Noise</th>
<th>Power Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>1365 BTU/</td>
<td>Hour</td>
</tr>
<tr>
<td>42 dBA</td>
<td></td>
</tr>
</tbody>
</table>

Operating/Storage Temperature

Operating: 0 to 35C (32 to 95F)
Storage: -10 to 50C (14 to 122F)
Operating Humidity: 20 to 80% non-condensing

Weight (Chassis Only)

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Weight (Chassis Only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L: 68.8 cm W: 58.5 cm H: 25.8 cm</td>
<td>39 kg</td>
</tr>
<tr>
<td>L: 27.1 in W: 23.1 in H: 10.2 in</td>
<td>86.0 lb</td>
</tr>
</tbody>
</table>

Safety & EMC Regulations

CE, FCC Class A, CCC

*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

<table>
<thead>
<tr>
<th>PDF CAD Drawings</th>
<th>User Guides</th>
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<tbody>
<tr>
<td>AUTOCAD Drawings</td>
<td>Important Information</td>
</tr>
</tbody>
</table>