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>Communication &amp; Control</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type</strong></td>
<td><strong>Connector</strong></td>
</tr>
<tr>
<td>DVI-D / DVI-A</td>
<td>DVI-I</td>
</tr>
<tr>
<td>HDMI 1.3</td>
<td>HDMI</td>
</tr>
<tr>
<td>3G-SDI</td>
<td>BNC</td>
</tr>
<tr>
<td>VGA / Analog RGB</td>
<td>15-pin D-Sub</td>
</tr>
<tr>
<td>Component Video</td>
<td>4 x BNC</td>
</tr>
<tr>
<td>S-Video</td>
<td>4-pin Mini DIN</td>
</tr>
<tr>
<td>Composite Video</td>
<td>RCA</td>
</tr>
<tr>
<td>Composite Video</td>
<td>BNC</td>
</tr>
</tbody>
</table>

High Bandwidth Ports
Main - Dual Link DVI-D
Sub - HDMI 1.4
Audio
SPDIF Digital Output

**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>0.8 - 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: 0.106 (U) 0.106 (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: 0.406 (U) 0.406 (D) frame, Hor: 0.188 (L) 0.188 (R) frame</td>
</tr>
<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>Table Top or Inverted: Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front/Rear Table</td>
<td>Yes</td>
</tr>
<tr>
<td>Front/Rear Ceiling</td>
<td>Yes</td>
</tr>
<tr>
<td>Adjustable Front/Rear Feet</td>
<td>Yes</td>
</tr>
<tr>
<td>Rugged</td>
<td>Yes</td>
</tr>
<tr>
<td>Orientations</td>
<td>Roll (Portrait): Yes</td>
</tr>
</tbody>
</table>

Power Requirements

| Power Consumption | 400W                        |

Thermal Dissipation

| Fan Noise | 42 dBA |

Operating/Storage Temperature

<table>
<thead>
<tr>
<th>Operating Temperature</th>
<th>Operating Humidity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating: 0 to 35C (32 to 95F)</td>
<td>20 to 80% non-condensing</td>
</tr>
<tr>
<td>Storage: -10 to 50C (14 to 122F)</td>
<td></td>
</tr>
</tbody>
</table>

Weight (Chassis Only)

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

PDF CAD Drawings

AUTOCAD Drawings

User Guides

Important Information