

## Lightning 38 WUXGA 3D

20,000 ANSI Lumens | Contrast Ratio: 2,000:1 | Part No:112-918



|                          |   |
|--------------------------|---|
| <b>Colour System:</b>    | <b>DMD Specification:</b>   |
| 3-chip DLP®              | 1920 x 1200 pixels native.<br>Fast transit pixels for smooth greyscale and improved contrast. |
| <b>Display Type:</b>     | <b>Aspect Ratio:</b>  |
| 3 x 0.96" DarkChip™ DMD™ | 16x10   |
|                          | <b>Fill Factor</b>  |
|                          | 87%   |

### Key Features

#### 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

| Video & Computer       |                |     | Communication & Control |                   |     |
|------------------------|----------------|-----|-------------------------|-------------------|-----|
| Type                   | Connector      | Qty | Type                    | Connector         | Qty |
| DVI-D / DVI-A          | DVI-I          | 1   | 3D Sync Out             | BNC               | 1   |
| HDMI 1.3               | HDMI           | 1   | 3D Sync In              | BNC               | 1   |
| 3G-SDI                 | BNC            | 1   | LAN                     | RJ45              | 1   |
| VGA / Analog RGB       | 15-pin D-Sub   | 1   | RS232                   | 9-pin D Sub       | 1   |
| Component Video        | 4 x BNC        | 1   | Wired Remote In         | 3.5mm Stereo Jack | 1   |
| S-Video                | 4-pin Mini DIN | 1   | Wired Remote Out        | 3.5mm Stereo Jack | 1   |
| Composite Video        | RCA            | 1   | Update Port             | RJ45              | 1   |
| Composite Video        | BNC            | 1   | Service Port            | USB Type B        | 1   |
| High Bandwidth Ports   |                |     |                         |                   |     |
| Main - Dual Link DVI-D | DVI-I          | 1   |                         |                   |     |
| Sub - HDMI 1.4         | DVI-I          | 1   |                         |                   |     |
| Audio                  |                |     |                         |                   |     |
| SPDIF Digital Output   | RCA            | 1   |                         |                   |     |

**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**

Proprietary 3kW xenon arc, bubble. Hypercooled lamp module with directional flow reflector mask and radial heat exchanger. Digital hour meter

**Typical Lamp Life**

500 hours

**Lenses**

| Lens                    | Part No. | Focus Range | Lens Shift  |
|-------------------------|----------|-------------|---|
| 0.67:1 fixed HB         | 105-607  | 1.1m - 10m  | Vert: 0.108 (U) 0.108 (D) frame, Hor: 0.044 (L) 0.044 (R) frame |
| 1.12:1 fixed HB         | 105-608  | 3m - 15m    | Vert: 0.567 (U) 0.45 (D) frame, Hor: 0.188 (L) 0.188 (R) frame  |
| 1.12:1 (short) fixed HB | 105-609  | 1.2m - 2m   | Vert: 0.567 (U) 0.45 (D) frame, Hor: 0.188 (L) 0.188 (R) frame  |
| 1.16 - 1.49:1 zoom HB   | 109-236  | 3m - 15m    | Vert: 0.408 (U) 0.408 (D) frame, Hor: 0.188 (L) 0.188 (R) frame |
| 1.39 - 1.87:1 zoom HB   | 105-610  | 4m - 24m    | Vert: 0.567 (U) 0.45 (D) frame, Hor: 0.188 (L) 0.188 (R) frame  |
| 1.87 - 2.56:1 zoom HB   | 105-611  | 4m - 24m    | Vert: 0.567 (U) 0.45 (D) frame, Hor: 0.188 (L) 0.188 (R) frame  |
| 2.56 - 4.16:1 zoom HB   | 105-612  | 9.1m - 45m  | Vert: 0.567 (U) 0.45 (D) frame, Hor: 0.188 (L) 0.188 (R) frame  |
| 4.16 - 6.96:1 zoom HB   | 105-613  | 12m - 80m   | Vert: 0.567 (U) 0.45 (D) frame, Hor: 0.188 (L) 0.188 (R) frame  |
| 6.92 - 10.36:1 zoom HB  | 109-235  | 12m - 80m   | Vert: 0.567 (U) 0.45 (D) frame, Hor: 0.188 (L) 0.188 (R) frame  |
| 1.50 - 2.17:1 zoom HB   | 114-143  | 5m - 25m    | Vert: 0.237 (U) 0.237 (D) frame, Hor: 0.104 (L) 0.104 (R) frame |
| 1.72 - 2.71:1 zoom HB   | 114-144  | 5m - 25m    | Vert: 0.237 (U) 0.237 (D) frame, Hor: 0.104 (L) 0.104 (R) frame |
| 2.15 - 3.36:1 zoom HB   | 114-145  | 5m - 25m    | Vert: 0.237 (U) 0.237 (D) frame, Hor: 0.104 (L) 0.104 (R) frame |

**Lens Mount**

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

**Mechanical Mounting**

Front/Rear Table  
 Front/Rear Ceiling  
 Adjustable Front/Rear Feet  
 Rugged, staging tolerant chassis with integrated handles.  
 Includes RapidRig™ frame with integrated pitch, roll and yaw adjustments.

**Orientation**

**Table Top or Inverted:** Yes  
**Pointing Up:** Yes  
**Pointing Down:** Yes  
**Roll (Portrait):** +/-10° from horizontal

**Power Requirements**

200-240 VAC, 50/60Hz single phase

**Power Consumption**

4000W

**Thermal Dissipation**

13649 BTU/Hour

**Fan Noise**

Less than 59dBA

**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)**

113 kg  
 249.1 lb

**Dimensions**

L: 111.6 cm W: 73.6 cm H: 54.5 cm  
 L: 43.9 in W: 29.0 in H: 21.5 in

**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.*

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