

## Lightning 45 SX+ 3D

30,000 ANSI Lumens | Contrast Ratio: 1,800:1 | Part No:112-897



<b>Colour System:</b> 3-chip DLP®	<b>DMD Specification:</b> 1400 x 1050 pixels native. Fast transit pixels for smooth greyscale and improved contrast.
<b>Display Type:</b> 3 x 0.95" DarkChip™ DMD™	<b>Aspect Ratio:</b> 4x3 <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 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	Bandwidth
------------------------	-----------

Up to 1920 x 1200	170 MHz on analog RGB 165 Megapixels per second on HDMI and DVI 297 Megapixels per second on Dual Link DVI
-------------------	--

Remote Control	Automation Control
----------------	--------------------

Addressable IR remote control, wireless and wired with loop-through. On-Board invertable keypad	RS232 LAN
--	--------------

Colour Temperature
--------------------

User selectable from 3200 to 9000K
------------------------------------

Lamp Type	Typical Lamp Life
-----------	-------------------

Proprietary 3.6kW xenon arc, bubble. Hypercooled lamp module with directional flow reflector mask and radial heat exchanger. Digital hour meter	500 hours
---	-----------

Lenses			
--------	--	--	--

Lens	Part No.	Focus Range	Lens Shift
0.73:1 fixed HB	105-607	1.1m - 10m	Vert: 0.114 (U) 0.114 (D) frame, Hor: 0.068 (L) 0.068 (R) frame
1.21:1 fixed HB	105-608	3m - 15m	Vert: 0.5 (U) 0.4 (D) frame, Hor: 0.2 (L) 0.2 (R) frame
1.21:1 (short) fixed HB	105-609	1.2m - 2m	Vert: 0.5 (U) 0.4 (D) frame, Hor: 0.2 (L) 0.2 (R) frame
1.26 - 1.61:1 zoom HB	109-236	3m - 15m	Vert: 0.362 (U) 0.362 (D) frame, Hor: 0.2 (L) 0.2 (R) frame
1.5 - 2.02:1 zoom HB	105-610	4m - 24m	Vert: 0.5 (U) 0.4 (D) frame, Hor: 0.2 (L) 0.2 (R) frame
2.02 - 2.77:1 zoom HB	105-611	4m - 24m	Vert: 0.5 (U) 0.4 (D) frame, Hor: 0.2 (L) 0.2 (R) frame
2.77 - 4.51:1 zoom HB	105-612	9.1m - 45m	Vert: 0.5 (U) 0.4 (D) frame, Hor: 0.2 (L) 0.2 (R) frame
4.51 - 7.53:1 zoom HB	105-613	12m - 80m	Vert: 0.5 (U) 0.4 (D) frame, Hor: 0.2 (L) 0.2 (R) frame
7.5 - 11.2:1 zoom HB	109-235	12m - 80m	Vert: 0.5 (U) 0.4 (D) frame, Hor: 0.2 (L) 0.2 (R) frame
1.63 - 2.35:1 zoom HB	114-143	5m - 25m	Vert: 0.221 (U) 0.221 (D) frame, Hor: 0.134 (L) 0.134 (R) frame
1.86 - 2.93:1 zoom HB	114-144	5m - 25m	Vert: 0.221 (U) 0.221 (D) frame, Hor: 0.134 (L) 0.134 (R) frame
2.33 - 3.64:1 zoom HB	114-145	5m - 25m	Vert: 0.221 (U) 0.221 (D) frame, Hor: 0.134 (L) 0.134 (R) frame

Lens Mount
------------

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

Mechanical Mounting	Orientation
---------------------	-------------

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

Power Requirements	Power Consumption
--------------------	-------------------

200-240 VAC, 50/60Hz single phase	4600W
-----------------------------------	-------

Thermal Dissipation	Fan Noise
---------------------	-----------

15696 BTU/Hour	Less than 59dBA
----------------	-----------------

Operating/Storage Temperature	Operating Humidity
-------------------------------	--------------------

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

Weight (Chassis Only)	Dimensions
-----------------------	------------

113 kg 249.1 lb	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.*

Image not found

<http://www.digitalprojection.co.uk/digital-products/images/lightning45-cad.jpg>

Downloads
-----------

[PDF CAD Drawings](#)

[User Guides](#)

[AUTOCAD Drawings](#)

[Important Information](#)

---

Specifications subject to change without notice. Digital Projection version: 1.3 - 14-Aug-13 ©2012 Digital Projection.  
DLP®, Digital Light Processing™ and DMD are trademarks of Texas Instruments, Inc

---

**DIGITAL PROJECTION, INC** 55 CHASTAIN ROAD, SUITE 115 KENNESAW, GA. 30144  
T: 770.420.1350 | F: 770.420.1360 | [www.digitalprojection.com](http://www.digitalprojection.com)

**DIGITAL PROJECTION, LTD** GREENSIDE WAY, MIDDLETON MANCHESTER, UK. M24 1XX  
T: +44.161.947.3300 | F: +44.161.684.7674 | [www.digitalprojection.co.uk](http://www.digitalprojection.co.uk)

**DIGITAL PROJECTION, CHINA** TOWER C, RM C1202, CAI FU JIA YUAN, NO. 19 XIAO YING STREET, CHAOYANG DISTRICT BEIJING,  
PR CHINA 100101  
T: +86.10.58239771 | F: +86 10 58239770

**DIGITAL PROJECTION, ASIA** 16 NEW INDUSTRIAL ROAD, #02-10 HUDSON TECHNOCENTRE SINGAPORE 536204  
T: +65.6284.1138 | F: +65.6284.1238