



## With a single objective in mind...

Digital Projection, determined to revolutionize the large screen projection market, has implemented extraordinary technologies to engineer **POWER & LIGHTNING Displays**, a range of large venue projectors with exceptional imaging capabilities and inspired operational simplicity.

Perfectly suited for theatrical, entertainment, business, education, simulation, religion, command and control, broadcast, post production and staging environments, no other light valve technology approaches the visual beauty and operational simplicity of Digital Projection's **POWER & LIGHTNING Displays**.

At 12,000 ( $\pm 5\%$ ) ANSI lumens and SXGA native resolution *the LIGHTNING 15sx* produces dazzling projected images for any application. The astonishing brightness of the projector is complemented by a palate of more than 1 billion colors, absolute grayscale tracking and luminance uniformity greater than 92%. The on-screen results are engaging video, HDTV and computer imagery with an inherent "film-like" appeal.

The **LIGHTNING 15sx** delivers these outstanding performance benefits:

- Ultra-high-brightness of 12,000 ( $\pm 5\%$ ) ANSI lumens. Bright enough for any application.
- 500:1 ( $\pm 5\%$ ) On to Off Contrast, 275:1 ( $\pm 5\%$ ) ANSI Contrast produces deep blacks and rich detail.
- Greater than 92% luminance uniformity for visually consistent imagery with no hot-spots.
- Source compatibility up to 1600 x 1200/1920 x 1080 pixels provides broad display flexibility.
- SXGA native resolution of 1280 x 1024 for exceptional "on screen" detail.
- Multi-format serial digital input.
- State of the art composite video decoding technology by Faroudja Laboratories.
- Advanced signal processing and image resizing by Cintel International.
- Solid state digital stability and factory preset convergence for fast and simple alignment.
- Motorized and programmable lens mount with horizontal and vertical shift – supports multi-aspect ratio applications.
- Pre-targeted Xenon lamp assures lamp replacement is fast and easy.
- Integrated light shutter, handles, stacking and rigging points.

## Always work with the experts...

Digital Projection takes the credit for conceiving, designing and manufacturing **POWER & LIGHTNING Displays**, but we must recognize our partners, experts in their fields, who executed the proprietary technologies that help make these products so brilliant.

**The miracle of the DMD by Texas Instruments:** A 3-chip Digital Micromirror Device™ (DMD) is the image modulator at the heart of every **POWER & LIGHTNING Display**. Digital Projection selected this imaging technology back in 1989, after our extensive analysis demonstrated the DMD's potential to accurately reflect individual pixels of light. Since then, Digital Projection engineers have worked closely with Texas Instruments, solving the challenges of the DMD and magnifying its performance for large venue projection applications.

**The Art of Image Resizing by Cintel:** The analogue and digital signal processing utilized in **POWER & LIGHTNING Displays** was developed in partnership with Cintel International, world leaders in telecine and image transfer technologies. By incorporating unique motion adaptive interpolation, both video and film originated images are optimized and recreated in their truest form. Sampling of computer images is carried out with resizing, where necessary, using GENESIS technology, allowing complete flexibility in displaying the widest range of computer input standards.

**Legendary Video Decoding by Faroudja Laboratories:** Although composite video is typically the lowest quality video signal available, it is likely to be among the most commonly utilized sources. Recognizing the importance of managing "real world" sources with the same artfulness we apply to the highest quality signals, Digital Projection partnered with Faroudja Laboratories, who developed advanced video decoding technology with exceptional color processing and artifact reduction, which has been specifically integrated in **POWER & LIGHTNING Displays**.

### USA Contact Details

Digital Projection, Inc.  
55 Chastain Road, Suite 115, Kennesaw, GA 30144, USA  
Tel: 770-420-1350 Fax: 770-420-1360  
e-mail: POWERINFO@digitalprojection.com  
website: www.digitalprojectiontech.com

### UK Contact Details

Digital Projection, Limited  
Greenside Way, Middleton, Manchester, M24 1XX, UK  
Tel: +44 161-947-3300 Fax: +44 161-684-7674  
e-mail: Enquiries@digitalprojection.co.uk  
website: www.digitalprojection.co.uk

## LIGHTNING 15sx Technical Specification

Brightness:	12,000 (±5%) ANSI lumens
Brightness Linearity:	>92% edge to center
Color Temperature:	3000K - 9300K Adjustable
Contrast Ratio:	>275:1(±5%) ANSI Checkerboard >500:1(±5%) Full Field
Display Type:	3 x DMD (one per R, G & B)
DMD Specification:	1280 x 1024 pixel 16.3µm x 16.3µm pixel size 17µm x 17µm pixel pitch 21.7mm x 17.4mm DMD size
Fill Factor:	92% pixel fill factor
Input Specification:	3 independently configurable inputs-selectable via remote control. BNC connectors. PAL, NTSC, SECAM, HDTV, VGA, SVGA, XGA, SXGA, UXGA & MAC Multi-format Serial Digital Input
RGBS:	RGB = 700 mV / 75R S = 0.7V - 5V Sync on G, Separate H & V, Composite Sync Auto Select
Component Video:	Y = 700 mV + 300 mV / 75R Pr, Pb = 700 mV p-p / 75R
Y/C (S video):	Y = 700 mV + 300 mV / 75R C = 300 mV p-p / 75R
Composite:	1 V p-p / 75R – Advanced video decoding by Faroudja Laboratories
Computer:	H = 15 kHz to 90 kHz V = 24 Hz to 100 Hz
Remote Control:	IR Receivers front and rear. Hard wire link to handset, optional PalmPilot control system, optional 9 Pin D type connector
Automation:	RS232 input/output loop-through, 9 Pin D type
Switcher:	Video Switcher output - RS232, 9 Pin D type
Lamp Type:	Xenon Arc, Bubble
Mounting:	Floor or ceiling, integrated handles, and stacking & rigging points
Lens Mount:	Motorized and programmable focus, horizontal and vertical lens shift accessed via remote control, light shutter
Lens Options:	1.5 - 2.0 : 1 Zoom 2.0 - 2.5 : 1 Zoom 2.5 - 4.0 : 1 Zoom 4.0 - 7.0 : 1 Zoom
Physical Dimensions:	419mm (16.5") height 706mm (27.8") width 1016mm (40") length
Weight (chassis only):	81 Kg (180 lbs)
Power Requirements:	208 - 240 V ac 50 - 60 Hz 4200 watts

### Design flexibility in, and complexity out...

To manage the mechanical complexities of diverse applications, Digital Projection developed a motorized and programmable lens mount, capable of providing extensive vertical and horizontal lens shift. When combined with our broad and flexible range of lens options and system accessories, *POWER & LIGHTNING* Displays can be mechanically integrated to solve nearly any application challenge.

The simplicity of our design is further exemplified by the remarkable alignment stability of *POWER & LIGHTNING* Displays. Factory preset convergence, exacting and stable color reproduction, digitally accurate image uniformity and user friendly on-screen menus ensure simple and confident setup and minimal maintenance, for even the most challenging large-screen applications.

### Seeing is Believing...

Specifications alone cannot tell the full story. The true beauty of *POWER & LIGHTNING* Displays comes to light when they are performing in your application. Ask us your toughest questions, study our customer service philosophy and experience a *POWER* or *LIGHTNING* Display for yourself. From our beautiful imagery, installation flexibility and customer service, you too will agree... Digital Projection puts the *POWER* in *your* hands.

