# Next-Generation LED Video Wall Solution

The next-generation Planar® DirectLight® X LED Video Wall System expands the award-winning Planar® DirectLight® LED Video Wall System platform to deliver the ultimate complete LED video wall solution. With the off-board Planar® Video Controller, Planar DirectLight X becomes the industry's first LED video wall solution to embed advanced video processing directly into the product.

Planar DirectLight X delivers a complete solution with an off-board video controller, off-board hot-swap power supplies, industry-leading wall mount, fine pixel pitch cabinets with full front service access, as well as modern, web-based control and management software.

Unique Architecture for a True All-In-One Solution

Engineered by LED video wall experts, Planar DirectLight X's next-generation design addresses the challenges and unique benefits of fine pitch LED. The architecture addresses mounting, alignment, reliability, fault-tolerance, fast service, power efficiency, scalability and long life, resulting in superior visual performance and value to the customer.

Scales to any size video wall with a range of pixel pitches

Front installation & front service

Optional Planar® ERO-LED™ protects surface

Optional Planar® LED MultiTouch available

Off-board power supplies keep heat, weight, depth, noise and points of failure away from the video wall

Planar Video Controller drives up to 9 Full HD display sections

Planar WallSync synchronizes video playback

Planar Remote Power Supply

Perfect alignment with Planar EasyAlign Mounting System

Less space required & ADA-Compliant

System Components:

- Planar DirectLight X LED cabinets
- Planar EasyAlign Mounting System
- Off-Board Planar Remote Power Supply and Planar Video Controller
- Planar Big Picture Plus video processing with Planar WallSync technology
- Planar WallDirector Software

Precision Alignment and Front Serviceability

The Planar® EasyAlign™ Mounting System simplifies installation, alignment and servicing of Planar DirectLight X LED video walls and features:

- An exceedingly thin <4" (<100mm) profile depth
- Perfect adjustment with six-axis alignment features
- Front service accessibility to all video wall system components
- Positive locking features for LED cabinet stability
- Flexible install options, including forward tilt (up to 10°), 90° corner installations and faceted curved video walls

2 levels of Z-axis

Designed for wall mounting

Adjusts and locks

< 4" mounted depth
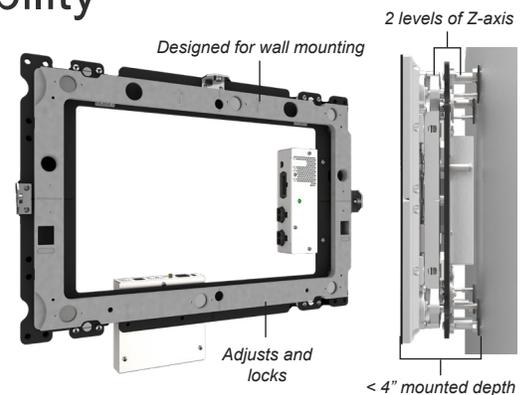
Mission Critical Design

The Planar® Remote Power Supply delivers mission-critical reliability with:

- 24x7 operation
- Hot-swappable Remote Power Supply Modules
- Low power standby mode
- Redundant AC input circuitry
- Reduced thermal stress, health and status monitoring capabilities
- Optional n+1 redundant power supply module

For government and military customers delivering highly sensitive information, Planar DirectLight X offers a Fiber Video Extension option—a more secure and longer distance option for extending the video signal.

Fits standard 19" rack

Hot-swappable modules

Optional n+1 redundant power supply module
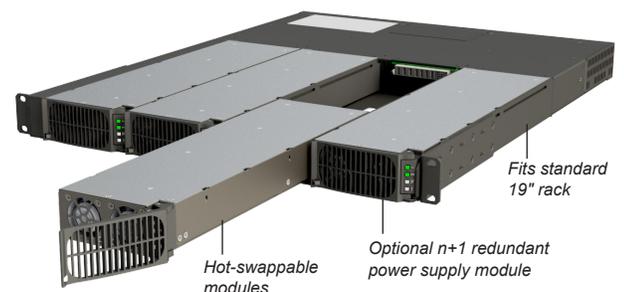
Advanced Video Wall Processing

Planar DirectLight X delivers extensive and flexible video wall processing options to display sources on the video wall. With Planar® Big Picture Plus™ Video Wall Processing, users can scale sources across the entire video wall or any section of the video wall and use high resolution content, up to 4K, to be spread over multiple sections at native resolution

Solving a range of video wall genlock and synchronization challenges, Planar DirectLight X includes Planar® WallSync™ genlock technology. Planar WallSync uses Smart Genlock to automatically ensure perfectly synchronized video playback without manual configuration.
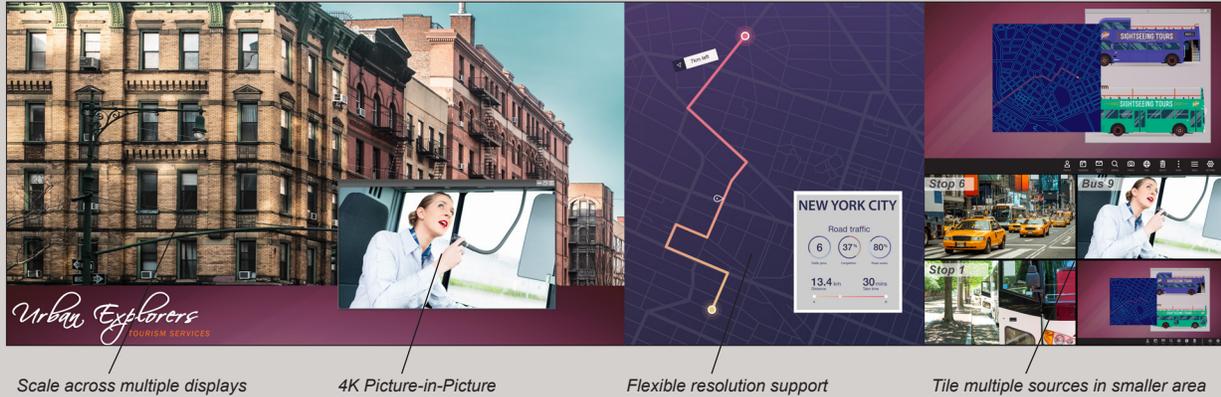
Scale across multiple displays   4K Picture-in-Picture   Flexible resolution support   Tile multiple sources in smaller area

Planar WallDirector Software

Planar DirectLight X features Planar® WallDirector™ Software, an intuitive and powerful software tool to simplify video wall installation, configuration and operation.

The Planar WallDirector Software allows users to:

- Set-up & configure a video wall
- Capture the health status of video wall components in a centralized, convenient location
- Recall windowing layouts via simple, one-button presets
- Drag & drop sources on the video wall canvas
- Easily manipulate the window size & position
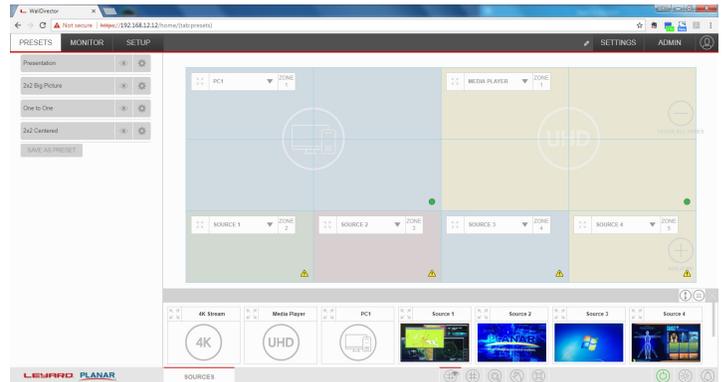
Ultra-High Resolution

Planar DirectLight X LED cabinets deliver a 16:9 aspect ratio and precise pixel pitch values that ensure every model achieves exact Full HD, 4K or 8K resolutions.

Full HD   **4K**   **8K**

Video Wall Resolution												
Models	**1 x 1**	**2 x 2**	**3 x 3**	**4 x 4**	**5 x 5**	**6 x 6**	**7 x 7**	**8 x 8**	**9 x 9**	**10 x 10**	**11 x 11**	**12 x 12**
DLX-0.7	768 × 432	1536 × 864	2304 × 1296	3072 × 1728	3840 × 2160	4608 × 2592	5376 × 3024	6144 × 3456	6912 × 3888	7680 × 4320	8448 × 4752	9216 × 5184
DLX-0.9	640 × 360	1280 × 720	1920 × 1080	2560 × 1440	3200 × 1800	3840 × 2160	4480 × 2520	5120 × 2880	5760 × 3240	6400 × 3600	7040 × 3960	7680 × 4320
DLX-1.2	480 × 270	960 × 540	1440 × 810	1920 × 1080	2400 × 1350	2880 × 1620	3360 × 1890	3840 × 2160	4320 × 2430	4800 × 2700	5280 × 2970	5760 × 3240
DLX-1.5	384 × 216	768 × 432	1152 × 648	1536 × 864	1920 × 1080	2304 × 1296	2688 × 1512	3072 × 1728	3456 × 1944	3840 × 2160	4224 × 2376	4608 × 2592
DLX-1.8	320 × 180	640 × 360	960 × 540	1280 × 720	1600 × 900	1920 × 1080	2240 × 1260	2560 × 1440	2880 × 1620	3200 × 1800	3520 × 1980	3840 × 2160
Video Wall Size (WxH)												
Feet *(ft)*	2.0 × 1.1	3.9 × 2.2	5.9 × 3.3	7.9 × 4.4	9.8 × 5.5	11.8 × 6.6	13.8 × 7.7	15.7 × 8.9	17.7 × 10	19.7 × 11.1	21.6 × 12.2	23.6 × 13.3
Meters *(m)*	0.6 × 0.34	1.2 × 0.67	1.8 × 1.0	2.4 × 1.3	3 × 1.6	3.6 × 2.0	4.2 × 2.3	4.8 × 2.7	5.4 × 3.0	6 × 3.3	6.6 × 3.7	7.2 × 4.0
Area *(sqm)*	0.20	0.81	1.82	3.24	5.06	7.29	9.92	12.96	16.40	20.25	24.50	29.16
Diagonal	27"	54"	81"	108"	136"	163"	190"	217"	244"	271"	298"	325in

PLANAR DIRECTLIGHT X LED VIDEO WALL SYSTEM SPECIFICATIONS

Model	DLX-0.7	DLX-0.9	DLX-1.2	DLX-1.5	DLX-1.8
Pixel Pitch	0.781mm	0.9375mm	1.25mm	1.5625mm	1.875mm
Display Resolution	768 x 432	640 x 360	480 x 270	384 x 216	320 x 180
Pixel Density (pixels)	1,638,400/sq m 152,212/sq ft	1,137,777/sq m 105,703/sq ft	640,000/sq m 59,458/sq ft	409,600/sq m 38,053/sq ft	284,444/sq m 26,426/sq ft
Brightness Max (cd/sq. m)	>400	>800			
LED surround	Black Solder Mask			Planar® MicroGrid Shader™	
Color Gamut	100% NTSC				
Contrast Ratio	>6000:1				
LED Refresh Rate	1920Hz	1920Hz	3000Hz	3000Hz	3000Hz
Color Temperature, Adjustable (k)	3200 - 9300				
Viewing Angles	160°, Horizontal	140° Vertical				
Display Size (W x H x D)	600 x 337.5 x 95mm	23.62 x 13.28 x 3.74in				
Mounted Depth	< 4", ADA-Compliant				
Display Weight (kg/display)	6.6kg	14.5lb				
Mount Weight per Display (kg/display)	3.2kg	7lb				
Power Consumption, Max (watts)	150/Display	741/sq m				
Acoustic Noise	Fanless Operation				
Operating Temperature (°F/C) 10-80% relative humidity, non-condensing	-10° to 40° C	-14° to 104° F				
Wall Mount	Planar EasyAlign Mounting System with 6-axis adjustment				
Installation and Service Access	Front				
Installation Options	Corner Installation: 90° corner, 15mm seam	Forward Tilt: up to 10°	Concave Curve: up to 30° facets				
Regulatory Compliance	NRTL UL 60950-1, FCC Class A, CE EN60950-1, EN 55032 Class A and EN55024, WEEE, CISPR 32/2015				

PLANAR REMOTE POWER SUPPLY

Model	RPS110	RPS220
Type	1RU rack mount; 19" rack	1.5RU rack mount; 19" rack
Line Voltage	100-240 Volts AC autoranging	200-240 Volts AC autoranging
Power Output	1200W per output	
Power Supply Configurations	1, 2 or 3 outputs	2, 4 or 6 outputs
Redundancy	n + 1 redundant option	
Hot Swap	Supported for each power supply module	
Low Power Standby Mode	<3W in standby mode	
Power Status	Diagnostic LEDs per power supply module	
Maximum Distance from Video Wall	200ft (61m) standard, 500ft (152.4m) maximum	

VIDEO CONTROLLER

Type	1U rack mount controller drives up to 9 Full HD (1920x1080) sections
Video Inputs	4x HDMI 2.0 (w/ HDCP 2.2); 1x DisplayPort 1.2
Video Outputs	9-Output Controller: 9x RJ45 8P8C, 1x DisplayPort 1.2 4-Output Controller: 4x RJ45 8P8C, 1x DisplayPort 1.2
Image Scaling	Planar Big Picture Plus Processing, Planar WallSync, PiP, 4K at 60Hz upscaling and downscaling
Control	IR Remote Control, RS-232, USB, Network, Planar WallDirector Software
Controller Status	Diagnostic LEDs, health monitoring and alerts
Maximum Distance from Wall	200ft (60m)

FIBER VIDEO EXTENSION MODULE OPTION

Type	1U rack mount module drives up to 4 Full HD (1920x1080) sections
Fiber Optic Connection Type	SFP multi-mode transceivers supports distances up to 1000ft (300m) from video wall. Compatible with single-mode transceivers supporting up to 10k from the wall. (Single-mode transceivers not provided)
USB Extension	USB-B at module; USB-A at panel
IR Remote Extension	Embedded
Power	AC Power Adapter; 100-240V AC ± 10%, 47 to 63 Hz; 50W