



# ELEMENTAL (Common Cathode)



## REVOLUTIONISING RENTAL FINE PITCH LED VR • XR • PRODUCTION • BROADCAST



HDR



≤7680HZ  
REFRESH RATE



≤240HZ  
FRAME RATE



PIXEL PITCHES:  
P0.9, P1.1, P1.25,  
P1.56, P1.8, P2.5

# ELEMENTAL

## Key Features



16:9



≥100,000  
LIFETIME



1080P, 4K UHD, 8K



LIGHTWEIGHT



WIDE GAMUT



GOB OPTIONAL



FAST INSTALL



DURABLE RUGGED  
DESIGN



FRONT & REAR  
SERVICE



REFLECTION  
REDUCTION TECHNOLOGY



HOT SWAP  
HUB BOARD



PIXEL PITCHES:  
P0.9, P1.1, P1.25, P1.56, P1.8, P2.5



# USE CASES



XR Production



Indoor Events



Immersive



Broadcast



# BROMPTON COMPATIBLE\*

Brompton Technology is the market leader in LED video processing for live events, film and television. Its Tessera system is used on everything from huge global world tours to pioneering virtual production and XR studios.

\*Brompton compatibility subject to specification

## ≥ 1/15 - WHY IS **SCAN RATE** IMPORTANT?

Lower scan rates mean higher performance for on-camera LED displays

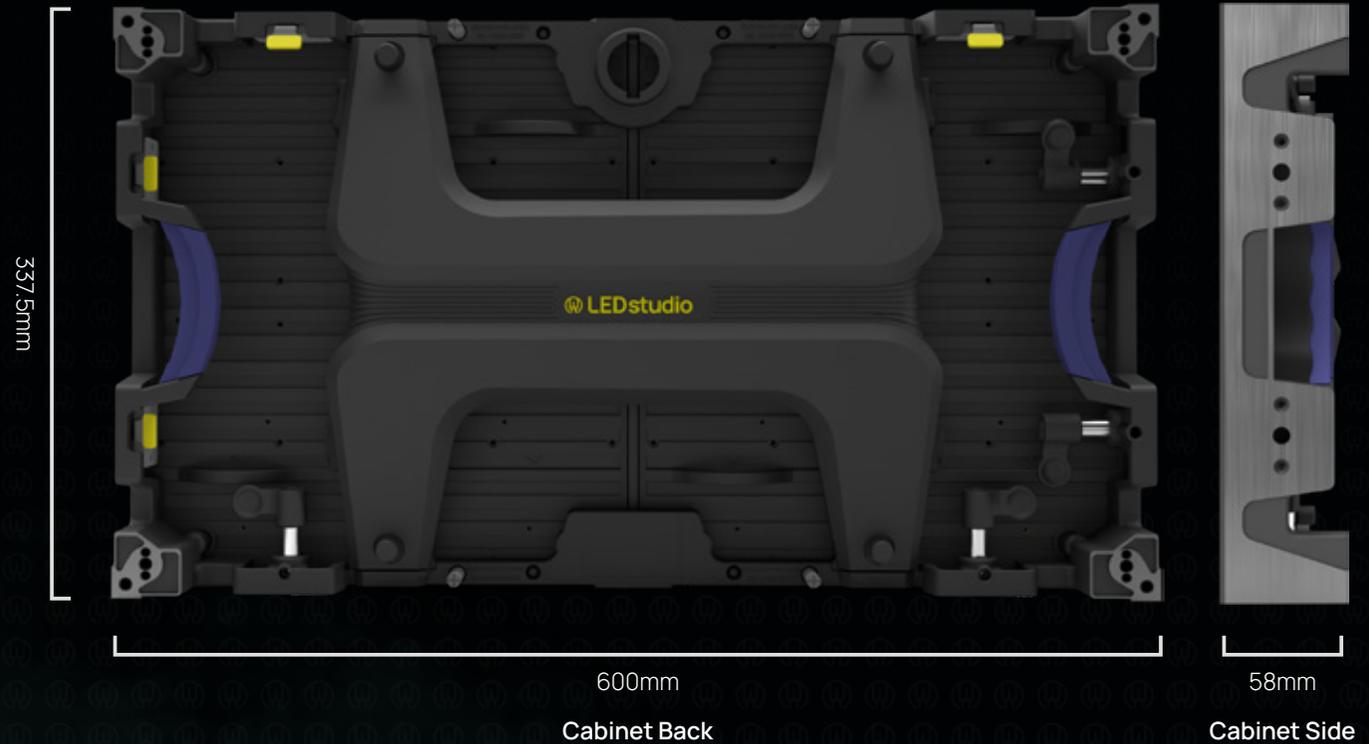
LED displays designed with a lower scan ratio has more time available to increase the LED refresh rate and/or increase the number of PWM bits—either of which will result in reduced camera artifacts, especially for low luminance content.



# FRONT & REAR SERVICE

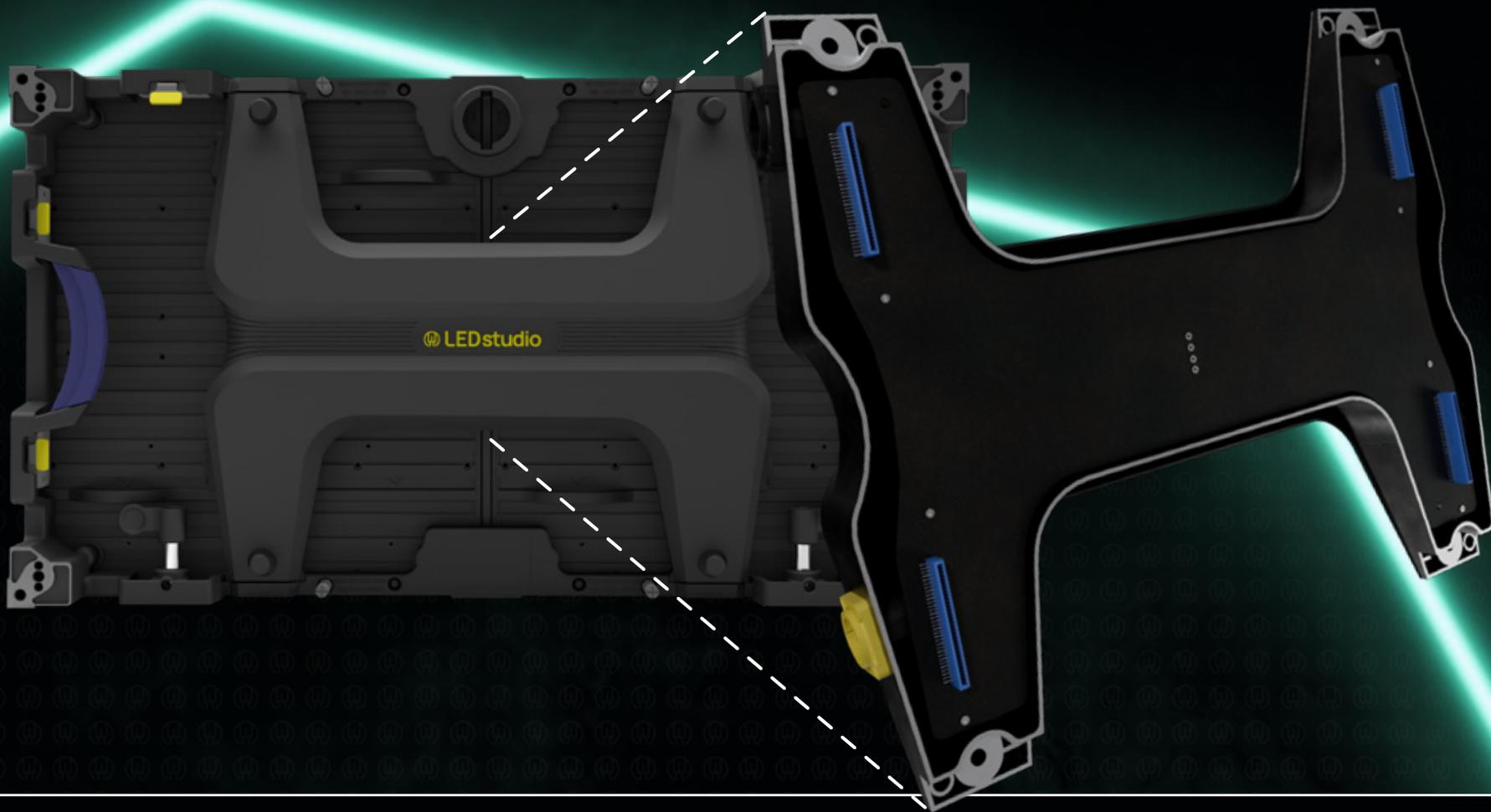
Fast & Efficient Servicing

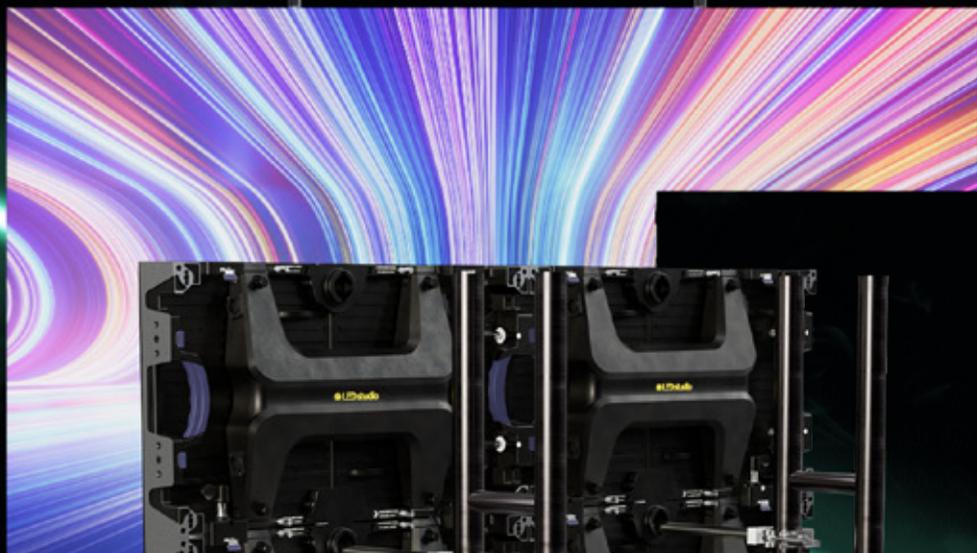
# SIMPLIFY YOUR INSTALL



# CABLE FREE CARTRIDGE DESIGN

Universal power and hub card with compatibility across all pixel pitch options, enabling fast and efficient hot swapping in the event of faults.



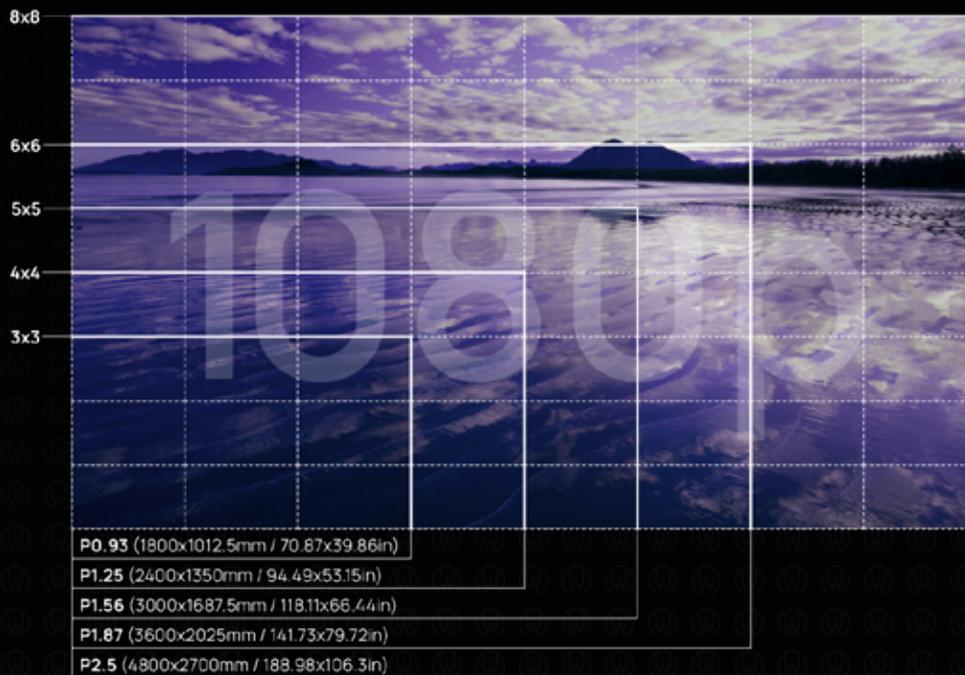


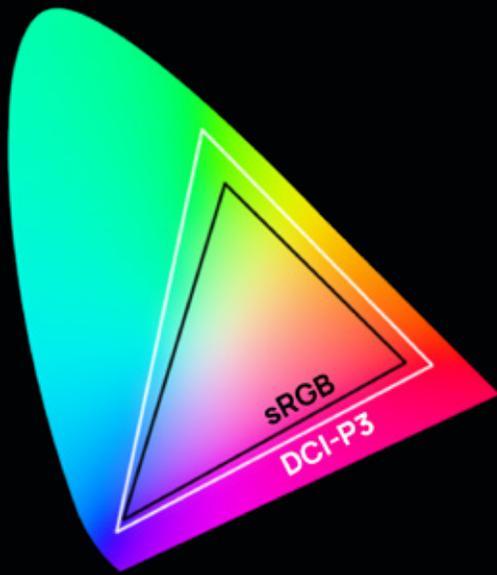
# MOUNTING METHODS

Ground stack or hanging truss fixing options allow for quick and efficient installation catering for live events and rental applications.

# FIXED RESOLUTIONS & CUSTOM SIZES

The ELEMENTAL can achieve familiar resolutions like 1080p, 4k UHD, 8K or custom arrays, shapes and sizes.





# 92% DCI-P3

DCI-P3 allows displays to reproduce a wider range of colours, including those that fall outside the traditional sRGB or Rec. 709 colour spaces. This expanded gamut enables more accurate colour representation, ensuring that the content appears as intended by the creators.

## COMMON CATHODE

Experience brilliance like never before with our cutting-edge LED display featuring common cathode technology. Immerse yourself in stunning visuals, unparalleled energy efficiency, and vibrant colors that come to life. The ELEMENTAL ensures impeccable uniformity and superior image performance. Each pixel shines independently, delivering consistent brightness and color accuracy across the screen. Say goodbye to uneven displays and hello to an extraordinary visual experience.



# VIRTUAL PRODUCTION READY

Frame rate vs Refresh Rate: Refresh rate is how often a display updates (measured in Hz), affecting smoothness and motion blur. Frame rate is frames shown per second in content (measured in fps), impacting visual smoothness. Both influence visual quality.



≤7680Hz - high refresh rates enable tracked cameras to reduce screen flicker and moire. Cameras can then be used closer to the screens, which has been an enduring complaint of virtual production as shots are usually mid to long in nature.



≤240FPS - high frame rates are crucial for virtual production helping achieve lifelike realism, seamless integration of virtual elements, reduced latency, and accurate representation of fast-paced actions. It empowers creators to push the boundaries of visual storytelling, delivering immersive and captivating experiences to audiences.

# ELEMENTAL Specifications SMD

Core Specifications						
Pixel Pitch	0.9375	1.17	1.25	1.56	1.875	2.5
Pixel Configuration	SMD	SMD	SMD	SMD	SMD	SMD
Module Size (mm) (ft'in") (W×H)	N/A					
Module Resolution (pixels) (W×H)	N/A					
Cabinet Size (mm) (ft'in") (W×H×D)	600 x 337.5 x 58 / 1' 11.62" x 1' 1.29" x 0' 2.28"	600 x 337.5 x 58 / 1' 11.62" x 1' 1.29" x 0' 2.28"	600 x 337.5 x 58 / 1' 11.62" x 1' 1.29" x 0' 2.28"	600 x 337.5 x 58 / 1' 11.62" x 1' 1.29" x 0' 2.28"	600 x 337.5 x 58 / 1' 11.62" x 1' 1.29" x 0' 2.28"	600 x 337.5 x 58 / 1' 11.62" x 1' 1.29" x 0' 2.28"
Cabinet Resolution (pixels) (W×H)	640 x 360	512 x 288	480 x 270	384 x 216	320 x 180	249 x 135
Display Size (mm) (ft'in") (W×H×D)	N/A					
Display Resolution (pixels) (W×H)	N/A					
Display Diagonal (in")	N/A					
Weight (kg/m <sup>2</sup> ) (lbs/ft <sup>2</sup> )	N/A					
Cabinet Weight (kg/lbs)	8.5 / 18.7	8.5 / 18.7	8.5 / 18.7	8.5 / 18.7	8.5 / 18.7	8.5 / 18.7
Maintenance	Front & Rear					
Brightness (nits)	2500	2500	2500	2500	2500	2500
Contrast Ratio	10,000:1	10,000:1	10,000:1	10,000:1	10,000:1	10,000:1
Lifetime Hours ≥	100,000	100,000	100,000	100,000	100,000	100,000
Aspect Ratio	16:9	16:9	16:9	16:9	16:9	16:9
IP Rating	IP54	IP54	IP54	IP54	IP54	IP54
Technical Specifications						
Viewing Angle	160 / 160	160 / 160	160 / 160	160 / 160	160 / 160	160 / 160
Grey Scale (bit)	10-24 bit					
Refresh Rate* (Hz)	3840	3840	3840	3840	3840	3840
Working Voltage	AC100-240V (50/60Hz)					
Scan Rate*	1/15 - 1/64	1/15 - 1/64	1/15 - 1/64	1/15 - 1/64	1/15 - 1/64	1/15 - 1/64
Operating Temperature (°C / °F)	-10 to +60 / +14 to +140					
Colour Temperature (K)	2500-9000K	2500-9000K	2500-9000K	2500-9000K	2500-9000K	2500-9000K
Operating Humidity (RH)	10% to 90%					
Maximum Power Consumption (W/m <sup>2</sup> ) (W/ft <sup>2</sup> ) ≤	300 / 27.9	300 / 27.9	300 / 27.9	300 / 27.9	300 / 27.9	300 / 27.9
Average Power Consumption (W/m <sup>2</sup> ) (W/ft <sup>2</sup> ) ≤	100 / 9.3	100 / 9.3	100 / 9.3	100 / 9.3	100 / 9.3	100 / 9.3

\*Scan Rate and Refresh Rate subject to project specifications.

\*Average power consumption is subject to display brightness and pixel configuration.

\*All data contained is subject to change based on project requirements.



Please contact us if you have any questions,  
we're always happy to help

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