



ELEMENTAL (Common Cathode)



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



≤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



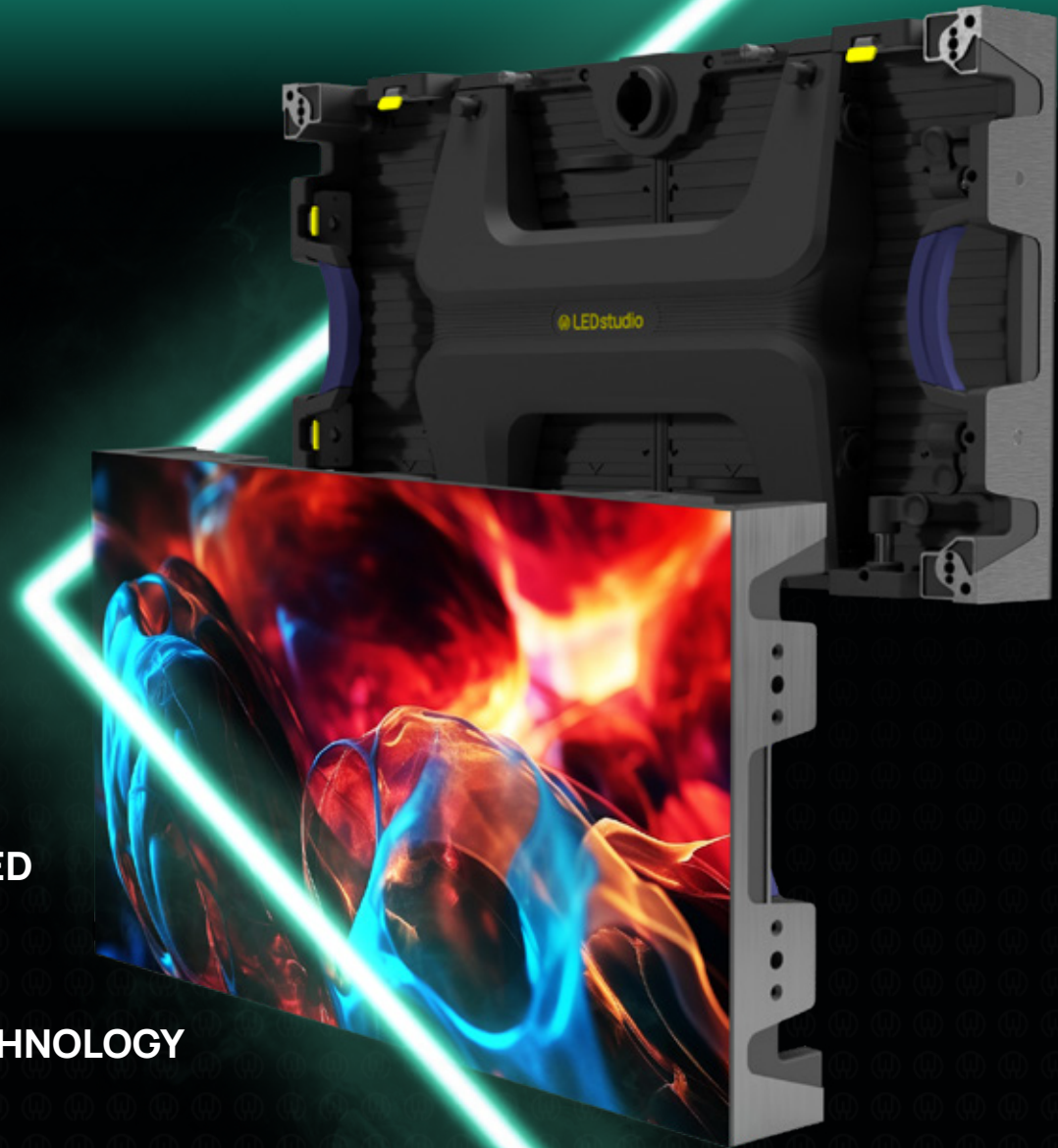
REFLECTION
REDUCTION TECHNOLOGY



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

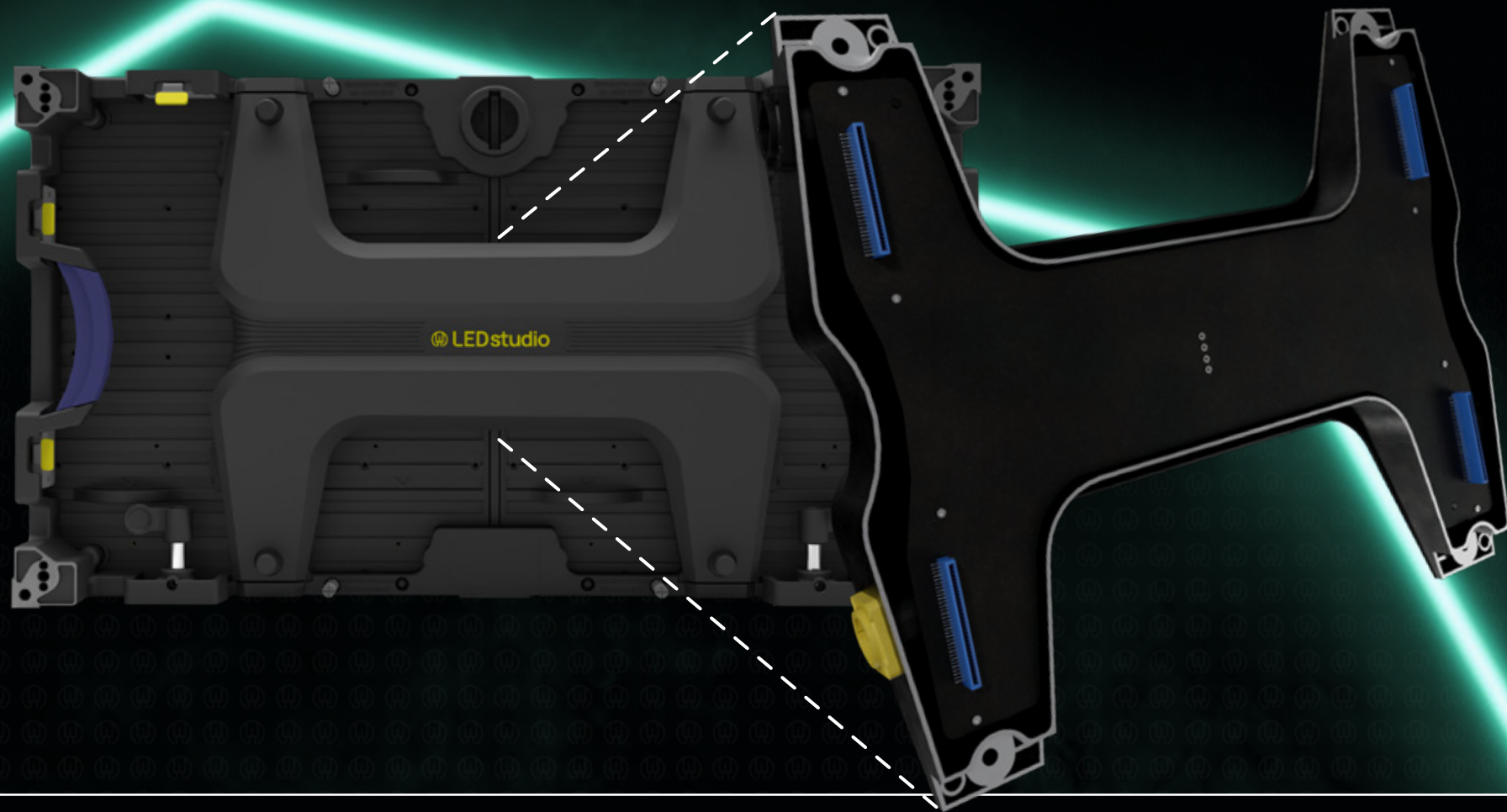
Fast & Efficient Servicing

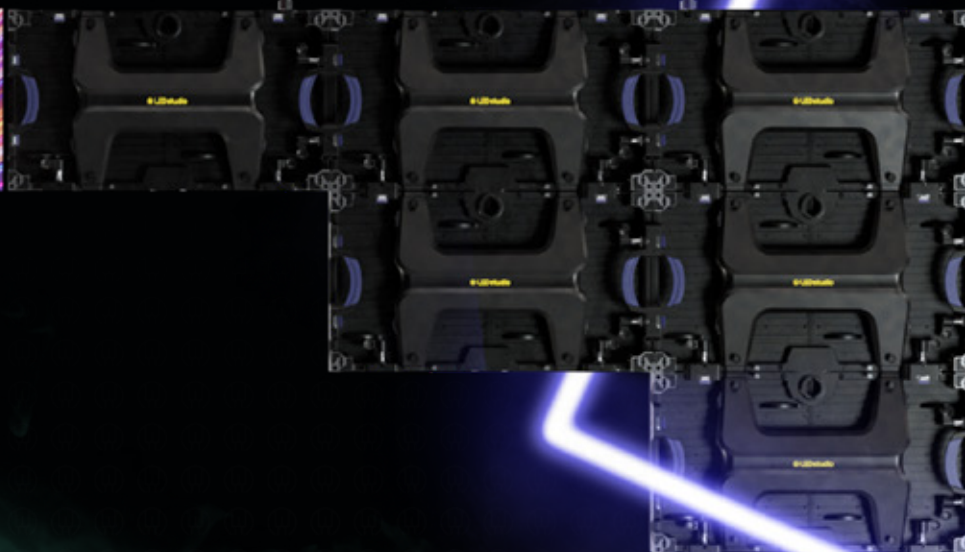
SIMPLIFY YOUR INSTALL



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.



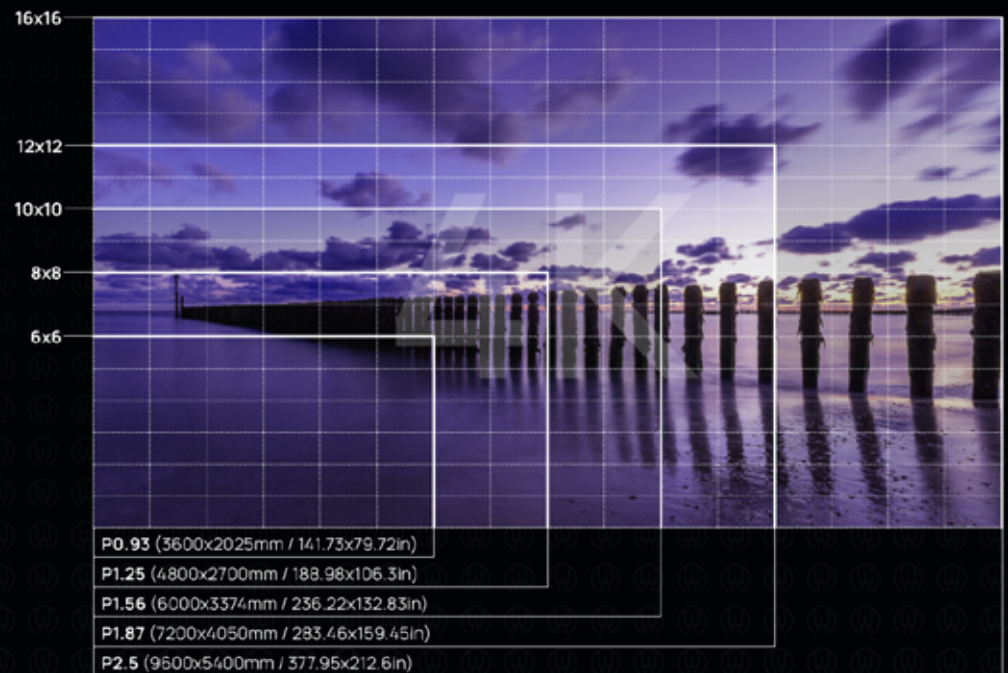
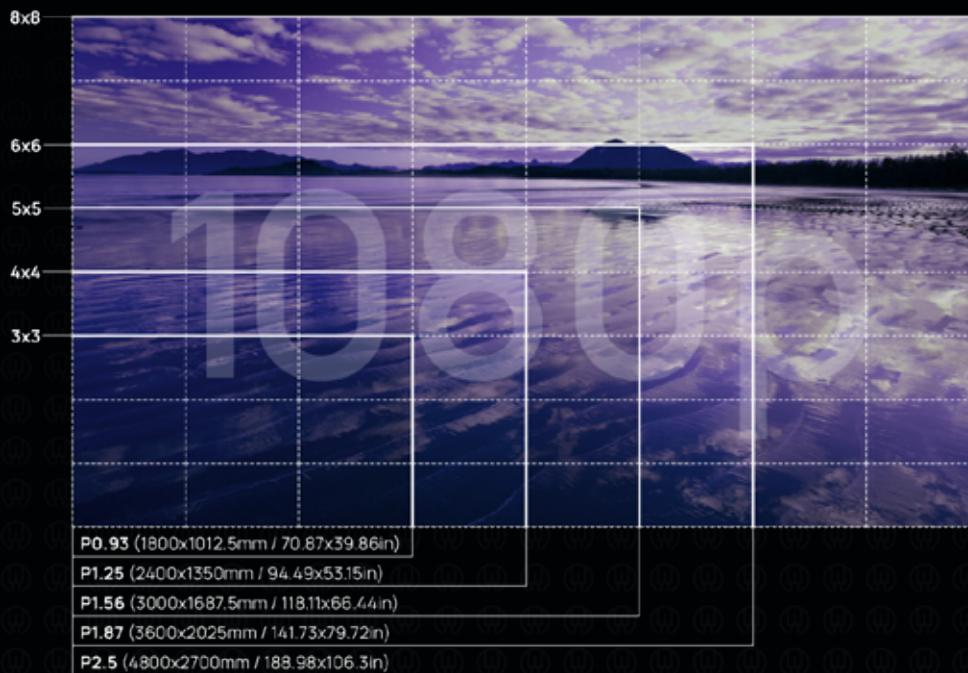


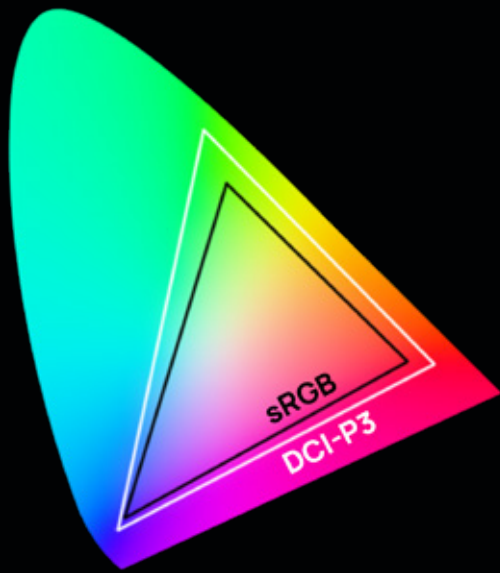
MOUNTING METHODS

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.

Specifications

Pixel Pitch (mm)	0.9375mm	1.17mm	1.25mm	1.5625mm	1.875mm	2.5mm
Cabinet Resolution	640×360	512×288	480×270	384×216	320×180	240×135
Dimensions (W+D+H)	600 × 337.5 × 58mm (23.62 × 13.29 × 2.28in)					
Pixel Density (pixels/sqm)	1137,778	728,128	640,000	409,600	284,444	160,000
Mask	Four in one	Optional	Optional	Optional	Optional	Optional
Lamp Type	MINI Four in one	SMD0808	SMD1010	SMD1010/1212	SMD1515	SMD2121
Pixels Calibration	Standard colour and brightness calibration					
Brightness	100cd~2500cd/ m ² (Optional highlight)					
Gray Scale	10~24Bit					
Colour Temp	2500K~9000K					
Scan Rate	≥1/15 - 1/64*					
Frame Frequency	60Hz, 120Hz, 240Hz*					
Refresh Rate	3840Hz*					
Working Voltage	AC-110V~240V, 50-60Hz					
Power Consumption (W/m² / W/ft²)	100-300 / 9.29-27.87					
Lifetime(hours)	≥100,000					
Operating Temp(°C / °F)	-10 ~ +60 / +14 - +140					
Storage Temp(°C / °F)	-25 ~ +60 / -13 - +140					
Humidity Range	10%~90%RH, Non-condensing					
Weight	8.5kg / 18.7lbs					

*Scan rates subject to specification

*240Hz possible upon specification

*Refresh rate can be increased to 7680Hz upon specification

*All data contained is subject to change.



LED display technology
for tomorrow's world.

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

www.theledstudio.com
sales@theledstudio.co.uk

UK Showroom

The Pavilion
Merchant Square
London, W2 1JZ
United Kingdom

Tel: +44 (0) 20 3832 9500

Head Office

Cromwell Place
Lime Tree Way
Basingstoke, RG24 8YJ
United Kingdom

Tel: +44 (0) 20 3852 9500

EMEA Office

169-171 Makarios III Avenue
Cedars Oasis Tower
3027, Limassol
Cyprus

Tel: +357 9625 8848

USA Office

22 Boston Wharf Road,
7th Floor,
Boston, MA 02210
USA

Tel: +1 (508) 657-4622

USA Showroom

123 Heiman Street, Suite 200,
San Antonio,
Texas 78205
United States

Tel: +1 (833) 533-7836