# BERYL XR EXTENDED REALITY RENTAL LED DISPLAY



www.artixium.com

#### EXTENDED REALITY RENTAL LED DISPLAY FRONT & BACK MAINTENANCE



90° C 👾 🏟



### **OVERVIEW**

The BERYL XR is the top notch Extended Reality oriented LED display. Available for indoor applications, it is designed to be easy to integrate into and to remove from any desired structure, making it an ideal choice for large audiovisual production sets that are more often than not temporary installations. Investing in the BERYL XR is a smart move for any company that deals with high end professional productions.



- APPLICATION Indoor
  - INGRESS PROTECTION IP20
- PIXEL PITCH P1.5 P1.9 P2.6
- DISPLAY AREA (W × H) 500 x 500 mm
- REFRESH RATE 7680 Hz
- BRIGHTNESS ≤ 1500 NITS MINILED 4IN1
- WEIGHT 8.5 kg/cabinet
  - MATERIAL **Anodized aluminum**
- MAINTENANCE Front & back maintenance





MAGNETIC FRONT ACCESS MODULES

MINILED 4IN1

CORNER PROTECTION

UNIVERSAL MODULES

TOOLLESS LOCKING SYSTEM

500 x 500 x 93 mm



- TRANSPORTATION HANDLE CABINET HANDLE / TOOLLESS LOCKING SYSTEM
  - DETACHABLE POWER BOX
    - TEST BUTTON
- TOOLLESS CURVE LOCKING SYSTEM

SCALABLE PHOSPHORESCENT HANDLE

### CUSTOMIZABLE INTEGRATION

The BERYL XR supports several types of integration, as it can be hung from a ceiling, stacked on the floor or even affixed to a structure. It also provides a toolless curve locking system to fit tailored installations on the spot, can be integrated at 90° concave angles and is both glare-resistant and scratch-resistant. These features make the BERYL XR easy to integrate and easy to displace, the same application can follow you all along your production process, saving you both time and money.

### PERFORMANT XR ORIENTED LED DISPLAY

The top two requirements for an effective XR LED set are high resolution and a low scan rate. Our BERYL XR comes in P1.5, P1.9 & P2.6, fine pixel pitches compared to our competitors' XR LED screens. Moreover, the 7680 Hz refresh rate allows for a smooth calibration and synchronization of your LED display with the cameras. While the quality of your renders will definitely show on this LED display, you can also rest assured your Extended Reality set will respond in realtime the camera and the actor's movements. Investing in the BERYL XR is the right choice if you want to get the best out of this technology.



FINE PIXEL PITCH FOR XR USE PHOSPHORESCENT ELEMENTS FOR MANIPULATION IN THE DARK



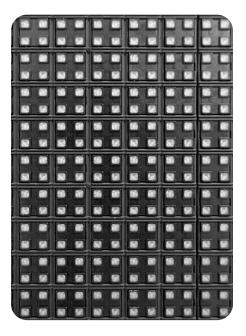
90° C

#### **OPTIMIZED SCAN RATE**

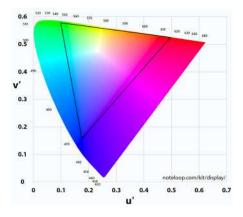
A LED display's scan rate is defined by the number of drivers compared to the number of integrated circuits. In principle, a single integrated circuit transmits a visual signal to a group of 16 LEDs, while a driver transmits the signal to a group of integrated circuits. By augmenting the number of drivers, you ensure a faster and more fluid signal transmission to all the LEDs that compose your XR screen. This makes your refresh rate much higher and thus allows a better calibration for your XR LED screen. Built with Brompton Technology processors, the BERYL XR cabinets have a 1/10 scan rate with a P1.5 pitch and a 1/8 scan rate with P1.9 & P2.6 pitches. Thus, your XR scene can easily attain a 7680 Hz refresh rate.

#### MINILED 4IN1

The MiniLED 4in1 consists in 4 small LEDs encapsulated in the space that a normal SMD LED represents. This technology offers numerous advantages, but the most noteworthy are the tremendous gains in both image resolution and LED durability. The first one is quite self-explanitory, as you multiply the effective number of LEDs by 4 on your modules. The second one is due to the encapsulation, which works like the GME technology, but on the LED level rather than on the whole module. While adding to the LEDs resistance, it still allows a qualified technician to repair each MiniLED 4in1 individually, while this operation is almost impossible on a GME module.



90° (C) 🌐 🕕



#### 99.9% OF DCI-P3 GAMUT

Digital Cinema Initiatives (DCI) is an association of cinema production companies. The DCI-P3 color gamut, created to render real-life colors as faithfully as possible, covers 25% more of the colorimetric space than sRGB. Thanks to its MiniLED 4in1, the BERYL XR can restitute the quasi-integrality of this space, which is destined to become the new standard for digital displays.

#### **HD PITCH**

The P1.5, P1.9 & P2.6 pixel pitches are what are considered to be fine pitches, Ultra HD pitches even. You can indeed easily attain Ultra HD or 4K definition with a limited number of cabinets. This feature is ideal for extended reality, where your scene's visual definition will be an obvious advantage for your different shootings.



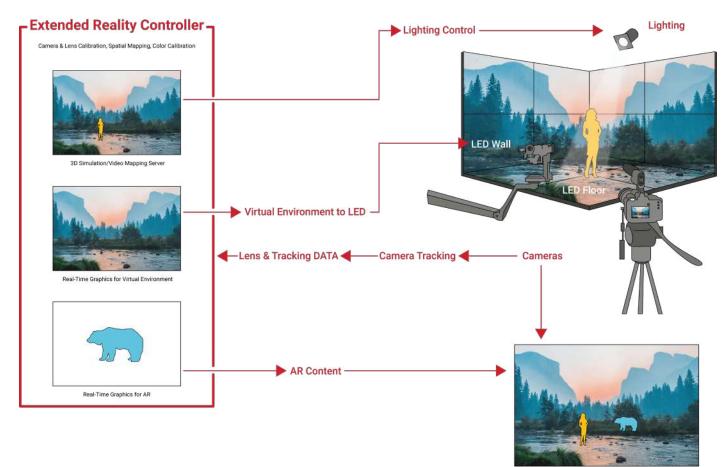
EXTENDED REALITY RENTAL LED DISPLAY FRONT & BACK MAINTENANCE





### **EXTENDED REALITY**

Extended Reality (XR) is the combination of Augmented Reality (AR) and Mixed Reality (MR). AR places virtual imagery over a live background, while MR combines camera tracking and realtime rendering to create an immersive virtual environment, visible live on the LED set and shot on camera. With XR, you can implement extremely complex visual effects to any audiovisual production, even live broadcast. You can use this technology in innumerable ways, as any media that uses cameras can upgrade to XR to further improve their audience's visual experience.



### **STANDARD XR STUDIO SETUP**

Vision Mixer Live Scene

## THE NEXT GENERATION OF AUDIOVISUAL PRODUCTION

XR technology is becoming a solution of choice for numerous video productions. Its advantage over the traditional green screens and other visual effect methods is obviously the real-time reaction to the actors and cameras movements, that allows for a live broadcasting or a much more immersive filming set that can be further enhanced during the post production process. An ever-growing number of television or cinema productions have already invested in this technology, for an astonishing result. Famous TV series "The Mandalorian" for instance is well known for its use of XR technology during the production process.

EXTENDED REALITY RENTAL LED DISPLAY **FRONT & BACK MAINTENANCE** 



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### BERYL XR P2.6 20221123

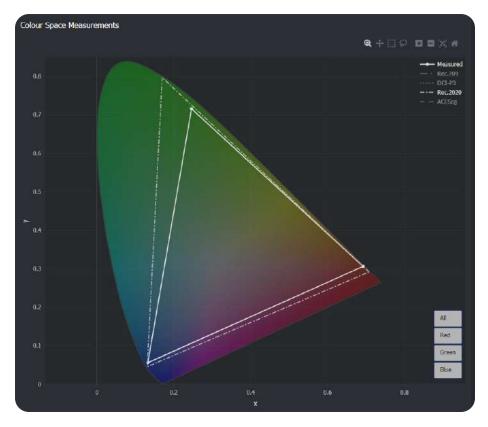
Report Type Generated Single Panel Report 23.11.2022-15:55

1574 <sub>Nits</sub>	91.6 %	68.1 %	83.6 %
Achievable Luminance at D65	Rec. 2020 Red Coverage	Rec. 2020 Green Coverage	Rec. 2020 Blue Covera
Panel Details Panel Type BERYL XR Indoor P2.6 Panel Serial 1 Firmware Version 3.4.4 BETA1 r9 Pack Version 3.4.4 BETA1	Module Serials 1-1 1-2 1-3 1-4	Measurement Details Batch BERYL XR P2.6 20221123 Hydra PTT14 Measurement App Version 3.2.2 RC3 Measurement Date 23.11.2022-15:53	

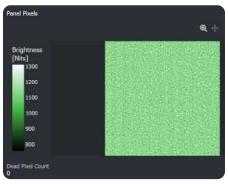


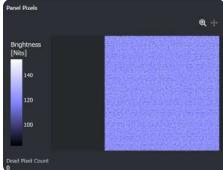
As a leader in the LED-oriented processing industry, Brompton Technology allows the production of the best XR LED screens. The different technical

specifications shown in this document are all corroborated by tests conducted with Brompton Technology's technical department.







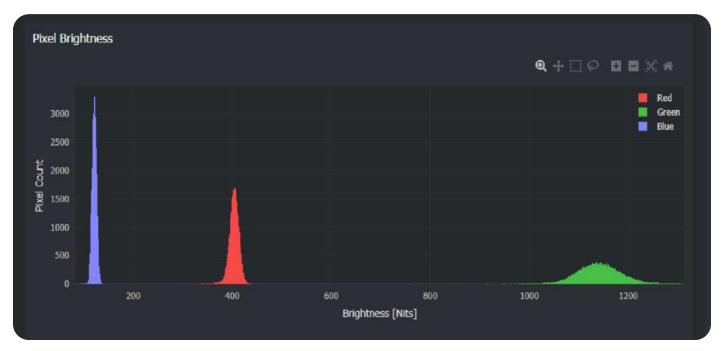


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	Coverage			White Point	Achievable Luminance	
	Red	Green	Blue	Total	write Point	Achievable Luminance
Rec. 709	100%	100%	99.7%	99.9%	D65	1574 Nits
DCI-P3	99.9%	100%	99.4%	99.8%		
Rec. 2020	91.6%	68.1%	83.6 <mark>%</mark>	80.4%		
ACEScg	87.9%	61.6%	81.5%	75.6%	ACES	1550 Nits
						2





# **BERYL** xr

EXTENDED REALITY RENTAL LED DISPLAY FRONT & BACK MAINTENANCE





### **TECHNICAL SPECIFICATIONS**

			INDOOR			
Product Parameters	Unit	1.5	1.9	2.6		
Pixel Pitch	mm	1,56	1,95	2,60		
LED		MiniLED 4in1				
Application			XR set LED application			
Ingress Protection	IP		IP20			
Brightness	cd/m²	≤ 800 Nits @5volts	≤ 1000 Nits @5volts	≤ 1500 Nits @5volts		
Color Temperature after calib (adjustable)	deg. K	6500				
Viewing Angle (50% brightness)	deg.	160 H / 140 V				
Cabinet Size (WxHxD)	mm		500 x 500 x 93			
Display area (WxH)	mm		500 x 500			
Module Size (WxHxD)	mm		250 x 250 x 15			
Pixel Matrix Per Cabinet (WxH)	рх	320 x 320	256 x 256	192 x 192		
Pixel Matrix Per Module (WxH)	рх	160 x 160	128 x 128	96 x 96		
Pixel Density	px/m²	409600	262144	147456		
Weight of cabinet and modules	kg	8.5				
Cabinet Material		Anodized aluminum				
Maintenance Mode		Front & Back				
Mask specification		95% Plastic + 5% Fiber / Clip type (no screws) / No Shaders				
Contrast Ratio		High				
Grey scale (linear)	bit	16				
Brightness control	bit	16				
Processing depth	bit	16				
Color		281 Trillions				
Scan Rate		1/10 1/8				
Display Refresh Rate	Hz		7680			
Operation Power	V	AC100-240V				
Max. Power Consumption	W/m²	Ę	560	420		
Average Power Consumption	W/m²	220		165		
Control Mode		Synchronization				
Video Frame Rate	Hz	50/60Hz				
nput Types Supported		S-video / VGA / DVI / SDI / HDMI				
3D ready (optional)		Yes				
Calibration			Yes			
ifetime (50% brightness)	h	50000				
Operating Humidity Range		10-95%				
Operating Temperature Range		-20°C / +45°C				
Screen Uniformity Correction		Below 0.0001 (Out of Control point)				
Certification		CE / ETL / CCC				
Features		Corner Protection, Curve				
Compatibility			-			

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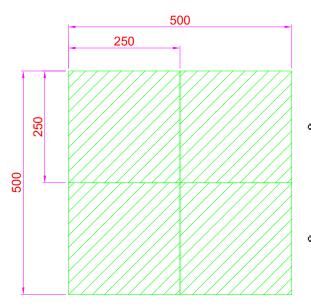
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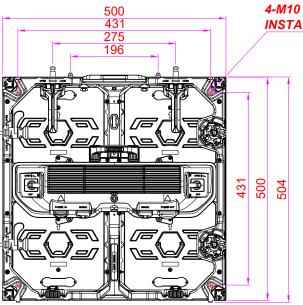
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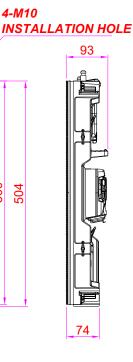
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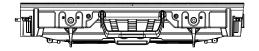


### TECHNICAL DRAWINGS

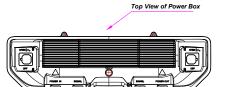


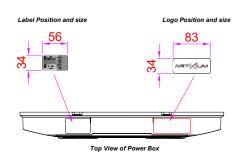






Label and Label Position and size on the Power Box



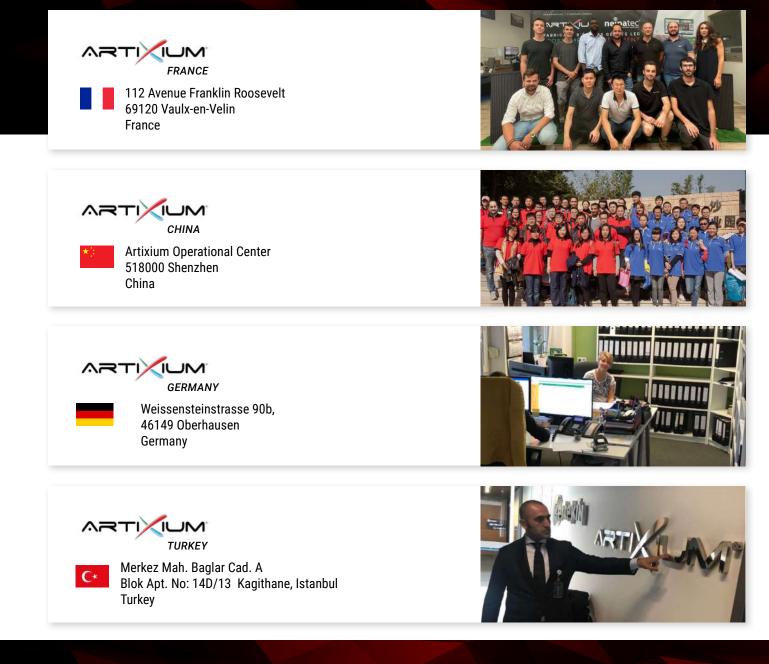




The Artixium regional branches are the key for the growth and development of our global network all over the world. Artixium's team is a spectrum of different nationalities and cultures, reflecting their global presence and mindset, making their communication smooth and hassle-free with clients from all around the world. Customer care, Innovation and flexibility has always been our values and we intend to keep this reputation for many years to come.

### **ARTIXIUM FRANCHISES**

"From your project's conception to its completion."



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Since its creation in 2012 by two european entrepreneurs, Artixium has been evolving and always looking for innovative ways to contribute to the digital transition of our world. It only took a few years for Artixium to become a key player in the LED display industry.

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