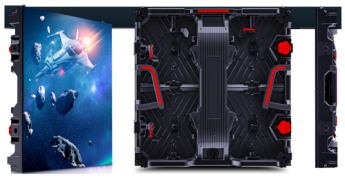
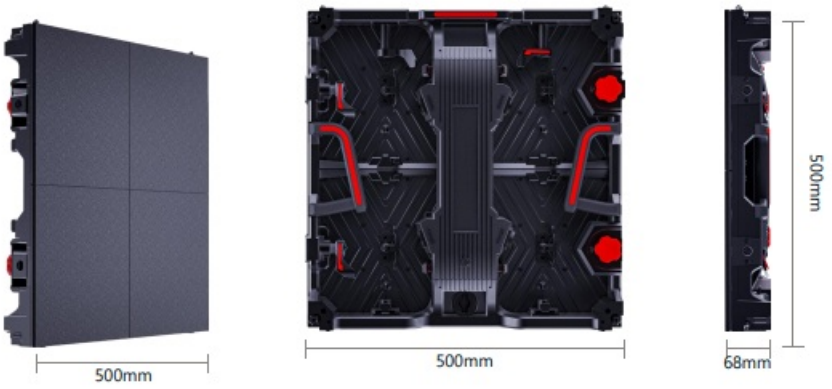


APEXLS KR2.9 XR Virtual LED Display Owner's Manual

APEXLS KR2.9 XR Virtual LED Display

xR Virtual LED display, specially design for the film industry and xR applications, to create a suitable canvas for movie production, The LED screen can be built into any size and shape. The LED panel, video processor and camera working together to achieve amazing video effects. Bring unlimited creativity and effectively, improve the efficiency to film and television program production.



Contents

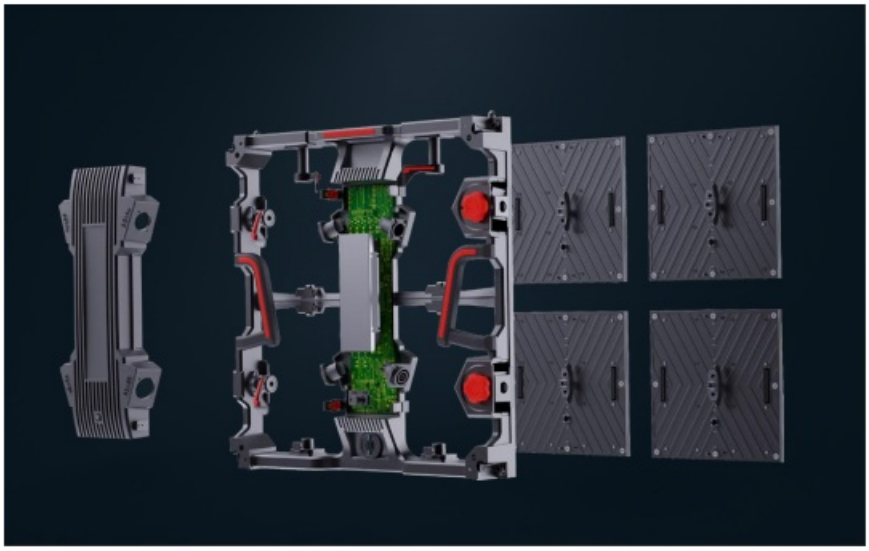
The structural features

Industrial design, high deformation resistance

High-precision CNC die-casting aluminum frame structure. Super black light printing materials with ≤3% light reflectance for the purpose of higher contrast rate.

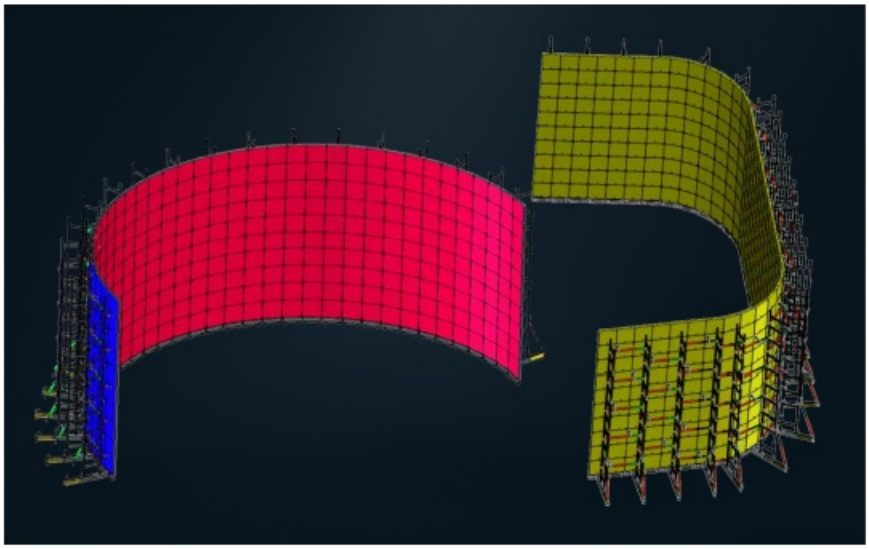
The maintenance feature

Independent modular design of the led module and control box, with magnetic accessories and quick locking & unlocking system. Fast front & rear installation and maintenance. Independent module's calibration and setting data saved in each individual module, easy for any independent led module's replacement and working.



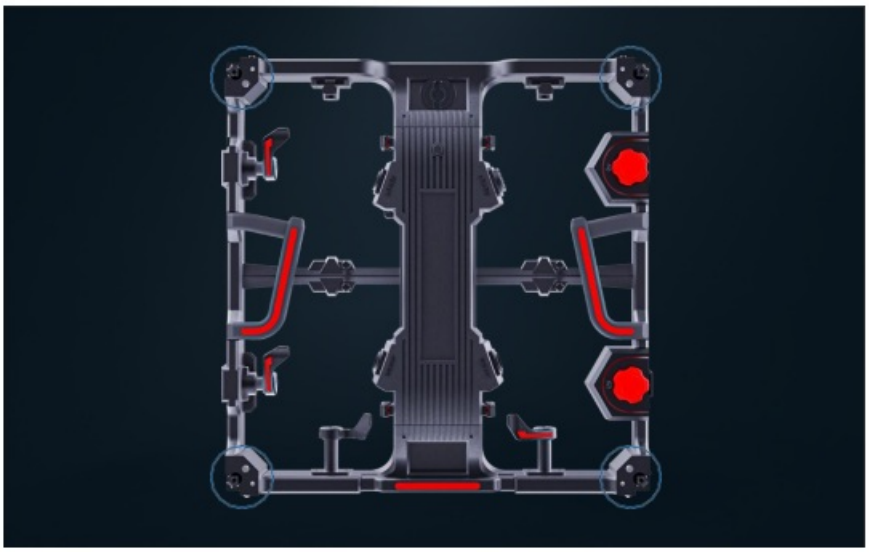
The installation features

Curved convex and concave up to ±6°. Modular design, suitable for stand and hanging installation. provide flexible solutions for the rental and fixed installation applications.



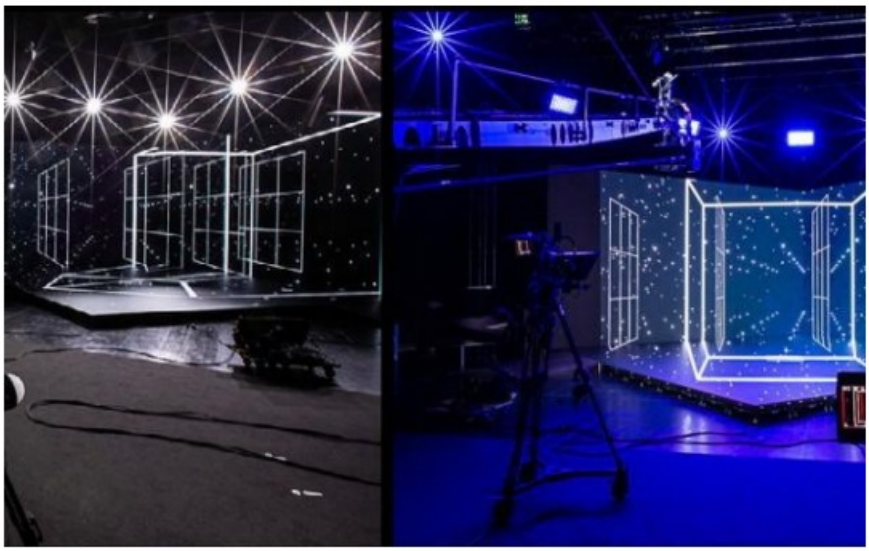
The protection features

LEDs protections: buffer protection design for every led cabinet corners, greatly reduced the damage of the LEDs. Fast locking system: magnetic auxiliary components and z-axis calibration up and down locking system for fast assemble & disassemble to reduce the LED’s damage.



The Multiple features

Multiple models options, meet various needs.
Industrial power systematic structure design. Built-in heat dissipation device for maximum optimization of heat dissipation, to ensure the stability and the reliability of LED display system properly working, meet the needs of high brightness usage purpose.



Electrical Features

Excellent visual effects

Ultra high refresh rate: up to 7680Hz, helps to avoid visible scanline excellent wide gamut and high contrast rate, High gray scale: up to 16bit, maximum reduction picture, forming accurate image, display image more clear and natural.

Super wide viewing Angle

High luminous rate, wide luminous Angle, wide viewing Angle, eliminate Mire's effect, excellent viewing effect.

Support HDR color matching: brightness, color temperature, gamma ray

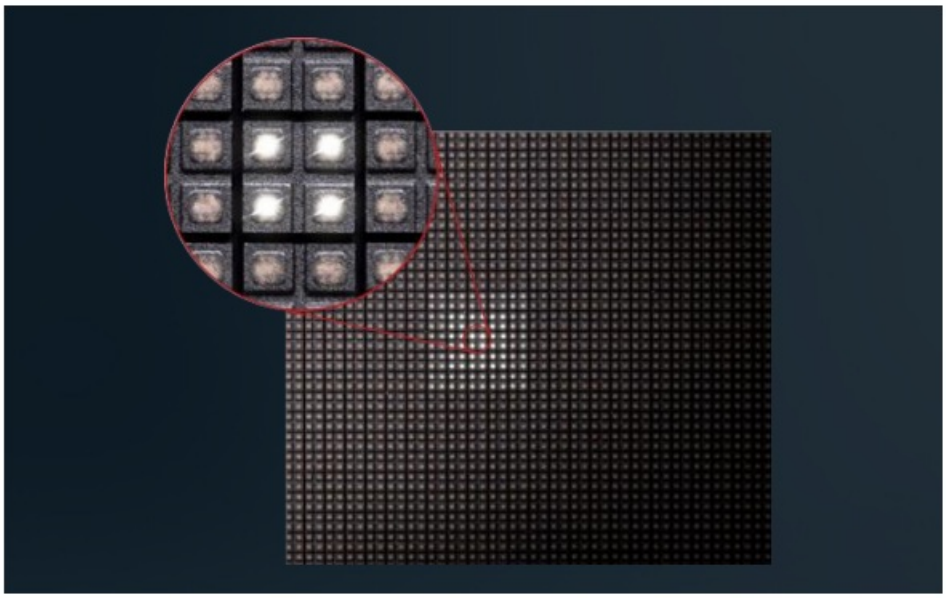
Support HDR parameters precise adjustment, restore true color, excellent color depth and gray level to make the unparalleled viewing effect.

Energy saving common cathoded solution

provide common cathoded solution, split power supply solution for less heat, low temperature rise, low energy consumption during the LED display operation.

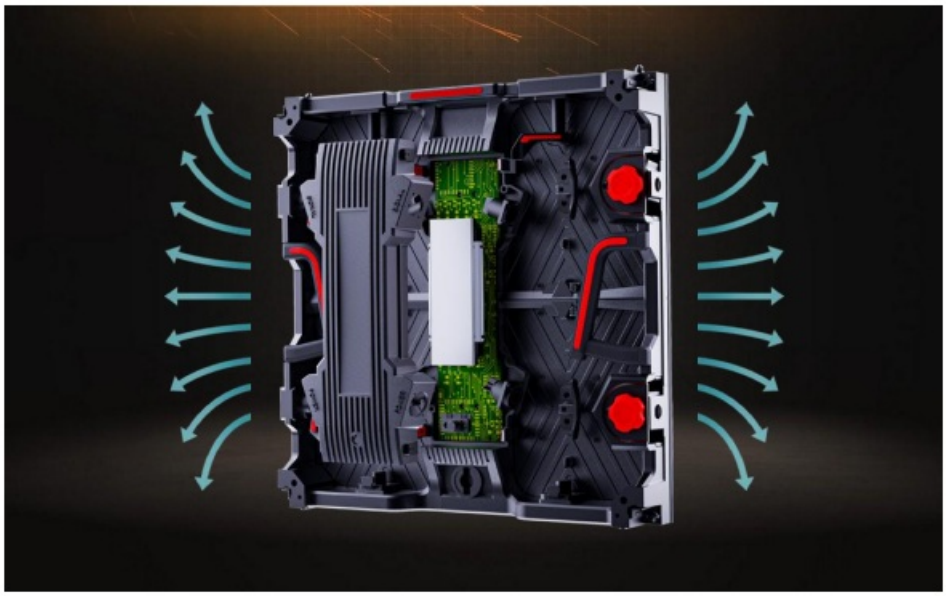
Advanced 4-in-1 LED technology

Independent 4 lenses for each 4IN1 LEDs, the enhanced design of the individual LEDs have higher contrast and optimal bright- ness, reducing glare, presenting excellent LED performance for best film shooting effect.



High power efficiency

Built-in radiator, power efficiency up to 90%, to reduce electrical loss, create less heat, higher the reliability.



Accessories

- Power wire

- Data wire

- Lifting beam

- Lifting lock

- Hanging & grabbing accessories

- seat mount connector

- double handle connection lock accessories

- four handle connection lock accessories

- seat mount frame

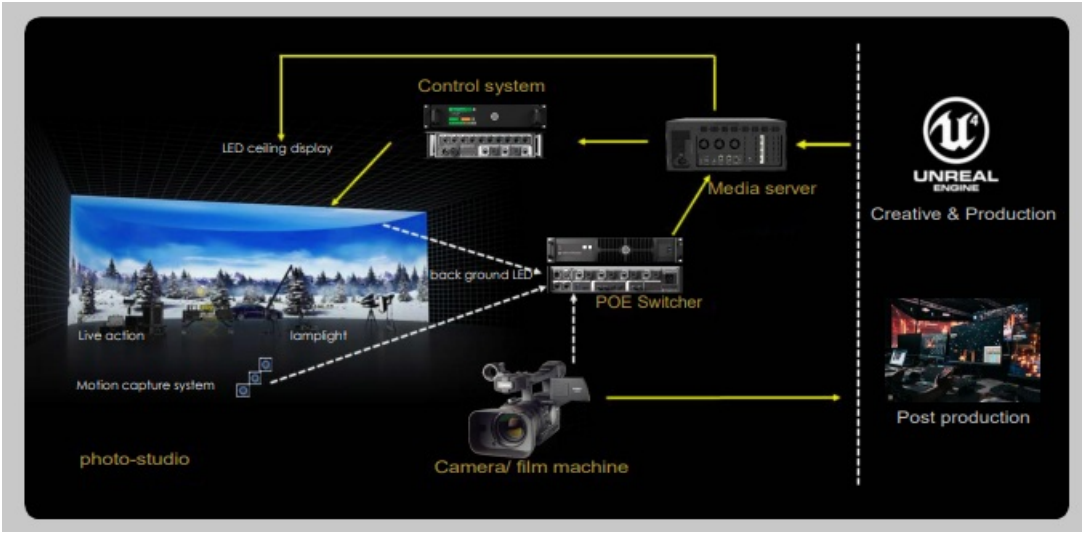
- seat mount beam accessories

- seat mount support frame

- seat mount support frame

- light case

Diagram of controlling



Back ground panel Specifications

Model	KR1.9	KR2.3	KR2.6
LED	SMD1212	SMD1515	SMD1515
Pixel Pitch (mm)	1.9531	2.3148	2.6041
Density(dots/m²)	262,144	186,624	147,456
Brightness after calibrated	≥1,200 nit	≥1,200 nit	≥1,200 nit
Refresh rate Hz	7,680	7,680	7,680
Module size (mm)	250×250	250×250	250×250
Module resolution(dots)	128×128	108×108	96×96
Panel size (mm)	500×500	500×500	500×500
Panel resolution (dots)	256×256	216×216	192×192
Scan mode	1/8	1/9	1/8
Gray degree bit	16		

View angle	H160˚/V160˚		
Controller	Brompton/NOVA		
Frequency of frames Hz	23.5~240		
Max Power Consumption (W/m²)	800		
Average Power (W/m²)	267		
Panel weight (kg/pcs)	8.5		
LED Failure rate(%)	≤0.02		
Operation Voltage (V/AC)	100~240		
Operation temp (℃)	-20~+45	-20~+40	-20~+40
Operation Humidity (RH)	10%-85%	10%-85%	10%-85%
Storage Temp (℃)	-10~+60	-10~+50	-10~+50
Storage Humidity (RH)	10%-90%		
LED life span	100,000 hrs		
IP Degree	Indoor		
Installation way	Stand / hanging		
Service type	Front / Rear		
Certificate approved	CE ETL FCC		

Arc degree range	Inner arc 6˚~Outer arc 6˚		
Best Viewing distance(m)	2.45~6.5	2.9~7.7	3.25~8.67

Ceiling display Specifications

Model	**KR2.9**	**KR3.9**	**KR4.8**
LED	3in1 SMD	3in1 SMD	3in1 SMD
Pixel Pitch (mm)	2.9761	3.9062	4.8076
Density(dots/m²)	112,896	65,536	43,264
Brightness after calibrated	≥3,000 nit	≥3,000 nit	≥3,000 nit
Refresh rate Hz	3,840-7,680	3,840-7,680	3,840-7,680
Module size (mm)	250×250	250×250	250×250
Module resolution(dots)	84×84	64×64	52×52
Panel size (mm)	500×500	500×500	500×500
Panel resolution (dots)	168×168	128×128	104×104
Scan mode	1/21	1/16	1/13
Gray degree bit	14		
View angle	H160˚/V160˚		
Controller	Brompton/NOVA		

Frequency of frames H	23.5~144		
Max Power Consumption (W/m²)	800		
Average Power (W/m²)	286		
Panel weight (kg/pcs)	8.5		
LED Failure rate(%)	≤0.02		
Operation Voltage (V/AC)	100~240		
Operation temp (℃)	-20~+45	-20~+40	-20~+40
Operation Humidity (RH)	10%-85%	10%-85%	10%-85%
Storage Temp (℃)	-10~+60	-10~+50	-10~+50
Storage Humidity (RH)	10%-90%		
LED life span	100,000 hrs		
IP Degree	Indoor		
Installation way	hanging		
Service type	Front / Rear		
Certificate approved	CE ETL FCC		

Floor display Specifications

Model	**KR3.9-SG**	**KR4.8-SG**	**KR5.9-SG**

LED	3in1 SMD	3in1 SMD	3in1 SMD
Pixel Pitch (mm)	3.9062	4.8076	5.9523
Density(dots/m²)	65,536	43,264	28,224
Brightness after calibrated	≥1,500 nit	≥1,500 nit	≥1,500 nit
Refresh rate Hz	7,680	7,680	7,680
Module size (mm)	250×250	250×250	250×250
Module resolution(dots)	64×64	52×52	42×42
Panel size (mm)	500×500	500×500	500×500
Panel resolution (dots)	128×128	104×104	84×84
Scan mode	1/8	1/13	1/7
Gray degree bit	16		
View angle	H160˚/V160˚		
Controller	Brompton/NOVA		
Frequency of frames H	23.5~240		
Max Power Consumption (W/m²)	800		
Average Power (W/m²)	267		
Panel weight (kg/pcs)	10.5		

LED Failure rate(%)	≤0.01		
Operation Voltage (V/AC)	100~240		
Operation temp (℃)	-20~+40	-20~+40	-20~+40
Operation Humidity(RH)	10%-85%	10%-85%	10%-85%
Storage Temp (℃)	-10~+50	-10~+50	-10~+50
Storage Humidity (RH)	10%-90%		
LED life span	100,000 hrs		
IP Degree	IP65		
Installation way	Guide rail tiled way		
Service type	Front		
Certificate approved	CE ETL FCC		
Surface Treatment	Macromolecule PC+ composite material		
Bearing capacity (kg/m²)		1,800	

Documents / Resources

	APEXLS KR2.9 XR Virtual LED Display [pdf] Owner's Manual KR2.9, KR3.9, KR4.8, KR2.9 XR Virtual LED Display, KR2.9, XR Virtual LED Display, Virtual LED Display, LED Display, Display