

NEXT-GENERATION CINEMA PROJECTION SOLUTION VLED LED CINEMA



VLED LED Cinema, a new-generation active light-emitting cinema projection solution, helps cinemas create a brand-new cinema hall with innovative experience. Compared with traditional projectors and other cinema LED products, it features:



Spectacular viewing experience

Active light-emitting, uniform brightness, high contrast and HDR content support

100,000 hours of lifetime

Equivalent to three digital projectors



Customized IMB for LED screen

Providing high-quality and convenient projection

More revenue opportunities

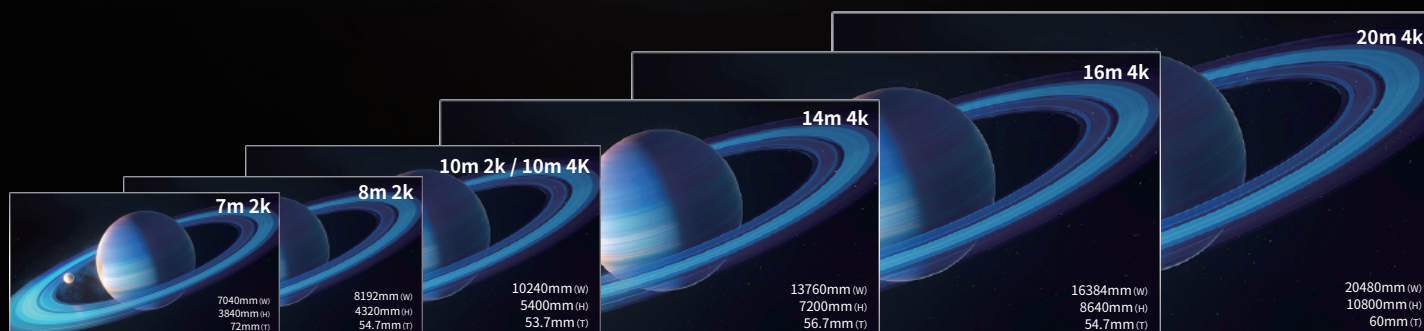
No projection room is required. Conferencing and entertainment events can be supported.



Nearly 40 VLED LED screens have been deployed in 31 cities in China



Product line



Specifications of VLED LED Cinema (7m)

Physical parameters	Full screen dimension	7040mm (W) x 3840mm (H) x 72mm (T)
	Pixel pitch	3.3mm
	Physical resolution (WxH)	2112×1152
	Image resolution (WxH)	2048×1080
	"Scope" aspect ratio (2.39:1)	2048×858
	"Flat" aspect ratio (1.85:1)	1998×1080
	Weight	612kg
	Installation method	Stand mounting with bracket
Electrical parameters	Input power	100-240 VAC, 50/60HZ
	Typical power	2,000 W (Note 1)
Optical parameters	Typical brightness	48nit (Typ) /300nit(Max)
	Contrast ratio	410000:1 (Note 2)
	Viewing angle	Vertical viewing angle 160° / Horizontal viewing angle 160°
	Color gamut	DCI-P3 (theater standard)
	Grayscale	16bit
Audio and video parameters	DCP video	SMPTE DCI compatible
		JPEG 2000 and MPEG-2
		2K 2D-24,25,30,48,50,60 fps
		2K 3D-24,25,30 fps
		SMPTE DCP bit rate greater than 500 Mbps
	Audio output	24-bit AES3, 16-channel PCM 48/96kHz (2xRJ45)
	Grayscale and format of video source	DCP (12-bit XYZ) 100% digital uncompressed JPEG2000
	Integrated storage	RAID-5(4TB) Optional configuration:3x2TB (SSD)
	Non-encrypted video input format	HDMI 2.0
	LED display refresh rate	3840Hz
	Caption	SMPTE caption; open caption rendering
		INTEROP caption rendering
Operating environment	Operating temperature and humidity	-10~40°C/15~65%RH
	Storage temperature and humidity	-20~60°C/10~85%RH
	Average LED lifetime	100,000 hours (Note 3)
Product certification	Certification standard	DCI
Service	Service	Rear service

Note 1, note 2 and note 3 are test data in laboratory

Specifications of VLED LED Cinema (8m)

Physical parameters	Full screen dimension	8192mm (W) x 4320mm (H) x 54.7mm (T)
	Pixel pitch	4mm
	Physical resolution (WxH)	2048 × 1080
	Image resolution (WxH)	2048 × 1080
	"Scope" aspect ratio (2.39:1)	2048 × 858
	"Flat" aspect ratio (1.85:1)	1998 × 1080
	Weight	950kg
	Installation method	Stand mounting with bracket
Electrical parameters	Input power	100-240 VAC, 50/60HZ
	Typical power	1,100 W (Note 1)
Optical parameters	Typical brightness	48nit (Typ) /300nit(Max)
	Contrast ratio	940000:1 (Note 2)
	Viewing angle	Vertical viewing angle 160° / Horizontal viewing angle 160°
	Color gamut	DCI-P3 (theater standard)
	Grayscale	16bit
Audio and video parameters	DCP video	SMPTE DCI compatible
		JPEG 2000 and MPEG-2
		2K 2D-24,25,30,48,50,60 fps
		2K 3D-24,25,30 fps
		SMPTE DCP bit rate greater than 500 Mbps
	Audio output	24-bit AES3, 16-channel PCM 48/96kHz (2xRJ45)
	Grayscale and format of video source	DCP (12-bit XYZ) 100% digital uncompressed JPEG2000
	Integrated storage	RAID-5(2TB) Standard configuration:3x1TB; RAID-5(4TB) Optional configuration:3x2TB (SSD)
	Non-encrypted video input format	HDMI 2.0
	LED display refresh rate	3840Hz
	Caption	SMPTE caption; open caption rendering
		INTEROP caption rendering
Operating environment	Operating temperature and humidity	-10~40°C/15~65%RH
	Storage temperature and humidity	-20~60°C/10~85%RH
	Average LED lifetime	100,000 hours (Note 3)
Product certification	Certification standard	DCI
Service	Service	Rear service

Note 1, note 2 and note 3 are test data in laboratory

Specifications of VLED LED Cinema (10m)

Physical parameters	Full screen dimension	10240mm (W) x 5400mm (H) x 53.7mm (T)
	Pixel pitch	5mm
	Physical resolution (WxH)	2048×1080
	Image resolution (WxH)	2048×1080
	"Scope" aspect ratio (2.39:1)	2048×857
	"Flat" aspect ratio (1.85:1)	1998×1080
	Weight	1371kg
	Installation method	Stand mounting with bracket
Electrical parameters	Input power	100-240 VAC, 50/60HZ
	Typical power	1,550 W (Note 1)
Optical parameters	Typical brightness	48nit (Typ) /300nit(Max)
	Contrast ratio	340000:1 (Note 2)
	Viewing angle	Vertical viewing angle 160° / Horizontal viewing angle 160°
	Color gamut	DCI-P3 (theater standard)
	Grayscale	16bit
Audio and video parameters	DCP video	SMPTE DCI compatible
		JPEG 2000 and MPEG-2
		2K 2D-24,25,30,48,50,60 fps
		2K 3D-24,25,30 fps
		SMPTE DCP bit rate greater than 500 Mbps
	Audio output	24-bit AES3, 16-channel PCM 48/96kHz (2xRJ45)
	Grayscale and format of video source	DCP (12-bit XYZ) 100% digital uncompressed JPEG2000
	Integrated storage	RAID-5(2TB) Standard configuration:3x1TB; RAID-5(4TB) Optional configuration:3x2TB (SSD)
	Non-encrypted video input format	HDMI 2.0
	LED display refresh rate	3840Hz
	Caption	SMPTE caption; open caption rendering
		INTEROP caption rendering
Operating environment	Operating temperature and humidity	-10~40°C/15~65%RH
	Storage temperature and humidity	-20~60°C/10~85%RH
	Average LED lifetime	100,000 hours (Note 3)
Product certification	Certification standard	DCI
Service	Service	Rear service

Note 1, note 2 and note 3 are test data in laboratory

Specifications of VLED LED Cinema (10m4K)

Physical parameters	Full screen dimension	10240mm (W) x 5400mm (H) x 60mm (T)
	Pixel pitch	2.5mm
	Physical resolution (WxH)	4096×2160
	Image resolution (WxH)	4096×2160
	"Scope" aspect ratio (2.39:1)	4096×1716
	"Flat" aspect ratio (1.85:1)	3996×2160
	Weight	1380kg
	Installation method	Stand mounting with bracket
Electrical parameters	Input power	100-240 VAC, 50/60HZ
	Typical power	3,800 W (Note 1)
Optical parameters	Typical brightness	48nit (Typ) /300nit(Max)
	Contrast ratio	980000:1 (Note 2)
	Viewing angle	Vertical viewing angle 160° / Horizontal viewing angle 160°
	Color gamut	DCI-P3 (theater standard)
	Grayscale	16bit
Audio and video parameters	DCP video	SMPTE DCI compatible
		JPEG 2000 and MPEG-2
		2K 2D-24,25,30,48,50,60 fps
		2K 3D-24,25,30 fps
		4K 2D-24 fps,48fps
		4K 3D-24 fps
		SMPTE DCP bit rate greater than 500 Mbps
	Audio output	24-bit AES3, 16-channel PCM 48/96kHz (2xRJ45)
	Grayscale and format of video source	DCP (12-bit XYZ) 100% digital uncompressed JPEG2000
	Integrated storage	RAID-5(2TB) Standard configuration:3x1TB; RAID-5(4TB) Optional configuration:3x2TB (SSD)
	Non-encrypted video input format	HDMI 2.0
	LED display refresh rate	3840Hz
	Caption	SMPTE caption; open caption rendering
		INTEROP caption rendering
Operating environment	Operating temperature and humidity	-10~40°C/15~65%RH
	Storage temperature and humidity	-20~60°C/10~85%RH
	Average LED lifetime	100,000 hours (Note 3)
Product certification	Certification standard	DCI
Service	Service	Rear service

Note 1, note 2 and note 3 are test data in laboratory

Specifications of VLED LED Cinema (14m)

Physical parameters	Full screen dimension	13760mm (W) x 7200mm (H) x 72mm (T)
	Pixel pitch	3.3mm
	Physical resolution (WxH)	4096×2160
	Image resolution (WxH)	4096×2160
	"Scope" aspect ratio (2.39:1)	4096×1716
	"Flat" aspect ratio (1.85:1)	3996×2160
	Weight	2776 kg
	Installation method	Stand mounting with bracket
Electrical parameters	Input power	100-240 VAC, 50/60Hz
	Typical power	7,000W (Note 1)
Optical parameters	Typical brightness	48nit (Typ) /300nit(Max)
	Contrast ratio	410000:1 (Note 2)
	Viewing angle	Vertical viewing angle 160° / Horizontal viewing angle 160°
	Color gamut	DCI-P3 (theater standard)
	Grayscale	16bit
Audio and video parameters	DCP video	SMPTE DCI compatible
		JPEG 2000 and MPEG-2
		2K 2D-24,25,30,48,50,60 fps
		2K 3D-24,25,30 fps
		4K 2D-24 fps,48fps
		4K 3D-24 fps
		SMPTE DCP bit rate greater than 500 Mbps
	Audio output	24-bit AES3, 16-channel PCM 48/96kHz (2xRJ45)
	Grayscale and format of video source	DCP (12-bit XYZ) 100% digital uncompressed JPEG2000
	Integrated storage	RAID-5(4TB) Optional configuration:3x2TB (SSD)
	Non-encrypted video input format	HDMI 2.0
	LED display refresh rate	3840Hz
	Caption	SMPTE caption; open caption rendering
		INTEROP caption rendering
Operating environment	Operating temperature and humidity	-10~40°C/15~65%RH
	Storage temperature and humidity	-20~60°C/10~85%RH
	Average LED lifetime	100,000 hours (Note 3)
Product certification	Certification standard	DCI
Service	Service	Rear service

Note 1, note 2 and note 3 are test data in laboratory

Specifications of VLED LED Cinema (16m)

Physical parameters	Full screen dimension	16384mm (W) x 8640mm (H) x 54.7mm (T)
	Pixel pitch	4mm
	Physical resolution (WxH)	4096×2160
	Image resolution (WxH)	4096×2160
	"Scope" aspect ratio (2.39:1)	4096×1716
	"Flat" aspect ratio (1.85:1)	3996×2160
	Weight	3800kg
	Installation method	Stand mounting with bracket
Electrical parameters	Input power	100-240 VAC, 50/60Hz
	Typical power	7,000W (Note 1)
Optical parameters	Typical brightness	48nit (Typ) /300nit(Max)
	Contrast ratio	940000:1 (Note 2)
	Viewing angle	Vertical viewing angle 160° / Horizontal viewing angle 160°
	Color gamut	DCI-P3 (theater standard)
	Grayscale	16bit
Audio and video parameters	DCP video	SMPTE DCI compatible
		JPEG 2000 and MPEG-2
		2K 2D-24,25,30,48,50,60 fps
		2K 3D-24,25,30 fps
		4K 2D-24 fps,48fps
		4K 3D-24 fps
		SMPTE DCP bit rate greater than 500 Mbps
	Audio output	24-bit AES3, 16-channel PCM 48/96kHz (2xRJ45)
	Grayscale and format of video source	DCP (12-bit XYZ) 100% digital uncompressed JPEG2000
	Integrated storage	RAID-5(4TB) Optional configuration:3x2TB (SSD)
	Non-encrypted video input format	HDMI 2.0
	LED display refresh rate	3840Hz
	Caption	SMPTE caption; open caption rendering
		INTEROP caption rendering
Operating environment	Operating temperature and humidity	-10~40°C/15~65%RH
	Storage temperature and humidity	-20~60°C/10~85%RH
	Average LED lifetime	100,000 hours (Note 3)
Product certification	Certification standard	DCI
Service	Service	Rear service

Note 1, note 2 and note 3 are test data in laboratory

Specifications of VLED LED Cinema (20m)

Physical parameters	Full screen dimension	20480mm (W) x 10800mm (H) x 60mm (T)
	Pixel pitch	5mm
	Physical resolution (WxH)	4096×2160
	Image resolution (WxH)	4096×2160
	"Scope" aspect ratio (2.39:1)	4096×1716
	"Flat" aspect ratio (1.85:1)	3996×2160
	Weight	5450kg
	Installation method	Stand mounting with bracket
Electrical parameters	Input power	100-240 VAC, 50/60Hz
	Typical power	4,700W (Note 1)
Optical parameters	Typical brightness	48nit (Typ) /300nit(Max)
	Contrast ratio	510000:1 (Note 2)
	Viewing angle	Vertical viewing angle 160° / Horizontal viewing angle 160°
	Color gamut	DCI-P3 (theater standard)
	Grayscale	16bit
Audio and video parameters	DCP video	SMPTE DCI compatible
		JPEG 2000 and MPEG-2
		2K 2D-24,25,30,48,50,60 fps
		2K 3D-24,25,30 fps
		4K 2D-24 fps,48fps
		4K 3D-24 fps
		SMPTE DCP bit rate greater than 500 Mbps
	Audio output	24-bit AES3, 16-channel PCM 48/96kHz (2xRJ45)
	Grayscale and format of video source	DCP (12-bit XYZ) 100% digital uncompressed JPEG2000
	Integrated storage	RAID-5(4TB) Optional configuration:3x2TB (SSD)
	Non-encrypted video input format	HDMI 2.0
	LED display refresh rate	3840Hz
	Caption	SMPTE caption; open caption rendering
		INTEROP caption rendering
Operating environment	Operating temperature and humidity	-10~40°C/15~65%RH
	Storage temperature and humidity	-20~60°C/10~85%RH
	Average LED lifetime	100,000 hours (Note 3)
Product certification	Certification standard	DCI
Service	Service	Rear service

Note 1, note 2 and note 3 are test data in laboratory

STAR-2000 Specification

Digital Cinema Server for LED

System Interfaces

- 1 x Gigabit Ethernet for DCP ingest
- 1 x Megabit Ethernet for SMS/TMS control
- 1 x HDMI 2.0 input (1920x1080 2D)
- 1 x HDMI 2.0 output for LED controller(2048*1080 2D/3D)
- 8 x GPI (2 xRJ-45)
- 8 x GPO (2 x RJ-45)
- 1 x SATA 6 Gbps for connection to RAID board
- 1 x eSATA 6 Gbps for ingest
- 1 x USB 3.0 for ingest
- 2 x RJ45 for audio output

DCP Playback

- SMPTE DCI compliant
- JPEG 2000 – Standard
 - 2K 2048 x 1080 – 2D:24/48 fps
 - 2K 2048 x 1080 – 3D :24 fps (per eye)
- MPEG-2 1920 x 1080 – 24 fps (2D)
- SMPTE and Interop Digital Cinema Packages (DCP) at bit rates up to 500 Mbps

Video Processing Feature

- Color-space conversion – supports any color-space to XYZ and X'Y'Z'
- Scaler to support downscaling 4K to 2K output

Audio Feature

- 24-bit AES3, 16 channel PCM 48/96kHz (2 x RJ45)
- Dolby Atmos supported

Control

- Web-based graphics user interface (SMS)
- GPIO based automation control
- Automatic Show Playlist scheduling
- API for TMS control

Subtitles

- SMPTE subtitle and open caption overlay
- INTEROP subtitle overlay
- Close Caption

Storages

- 3 x 2.5" 1 TB hard disk drives
- Approximately 2TB user storage
- 3 x 2.5" 2 TB solid state drives(option)
- Approximately 4TB user storage

Power Consumption

- Less than 60W

Physical and Environmental

- IMB Dimensions (WxHxD): 295 x 35 x 278 mm
- Weight: 1.44 kg
- Operating temperature: 5°C to 40°C
- Operating humidity: 10% to 90%, non-condensing

STAR-2424 Specification

Digital Cinema Server for LED

System Interfaces

- 1 x Gigabit Ethernet for DCP ingest
- 1 x Megabit Ethernet for SMS/TMS control
- 1 x HDMI 2.0 input (3840x2160 2D)
- 1 x HDMI 2.0 output for LED controller(4096*2160 2D/
2048*1080 3D)
- 8 x GPI (2 xRJ-45)
- 8 x GPO (2 x RJ-45)
- 1 x SATA 6 Gbps for connection to RAID board
- 1 x eSATA 6 Gbps for ingest
- 1x USB 3.0 for ingest
- 2x RJ45 for audio output

DCP Playback

- SMPTE DCI compliant
- JPEG 2000 – Standard
 - 2K 2048 x 1080 – 2D:24/48 fps
 - 2K 2048 x 1080 – 3D :24 fps(per eye)
 - 4K 4096 x 2160 – 2D:24 fps
- MPEG-2 1920 x 1080 – 24 fps(2D)
- SMPTE and Interop Digital Cinema Packages (DCP) at bit rates up to 500 Mbps

Video Processing Feature

- Color-space conversion – supports any color-space to XYZ and X'Y'Z'

Audio Feature

- 24-bit AES3, 16 channel PCM 48/96kHz (2 x RJ45)
- Dolby Atmos supported

Control

- Web-based graphics user interface (SMS)
- GPIO based automation control
- Automatic Show Playlist scheduling
- API for TMS control

Subtitles

- SMPTE subtitle and open caption overlay
- INTEROP subtitle overlay
- Close Caption

Storages

- 3 x 2.5" 2 TB solid state drives
- Approximately 4TB user storage

Power Consumption

- Less than 60W

Physical and Environmental

- IMB Dimensions (WxHxD): 295 x 35 x 278 mm
- Weight: 1.44 kg
- Operating temperature: 5°C to 40°C
- Operating humidity: 10% to 90%, non-condensing

STAR-2460 Specification

Digital Cinema Server for LED

System Interfaces

- 1 x Gigabit Ethernet for DCP ingest
- 1 x Megabit Ethernet for SMS/TMS control
- 1 x HDMI 2.0 input (3840x2160 2D Maximum)
- 3 x DV output for LED controller(4096*2160 2D/3D)
- 8 x GPI (2 xRJ-45)
- 8 x GPO (2 x RJ-45)
- 1 x SATA 6 Gbps for connection to RAID board
- 1 x eSATA 6 Gbps for ingest
- 1 x USB 3.0 for ingest
- 2 x RJ45 for audio output

DCP Playback

- SMPTE DCI compliant
- JPEG 2000 – Standard
 - 2K 2048 x 1080 – 2D:24/48/60/120 fps
 - 2K 2048 x 1080 – 3D :24/48/60 fps(per eye)
 - 4K 4096 x 2160 – 2D:24/30/60 fps
 - 4K 4096 x 2160 – 3D:24/30 fps(per eye)
- MPEG-2 1920 x 1080 – 24 pfs (2D)
- SMPTE and Interop Digital Cinema Packages (DCP) at bit rates up to 500 Mbps

Video Processing Feature

- Color-space conversion – supports any color-space to XYZ and X'Y'Z'

Audio Feature

- 24-bit AES3, 16 channel PCM 48/96kHz (2 x RJ45)
- Dolby Atmos supported

Control

- Web-based graphics user interface (SMS)
- GPIO based automation control
- Automatic Show Playlist scheduling
- API for TMS control

Subtitles

- SMPTE subtitle and open caption overlay
- INTEROP subtitle overlay
- Close Caption

Storages

- 3 x 2.5" 2 TB solid state drives
- Approximately 4TB user storage

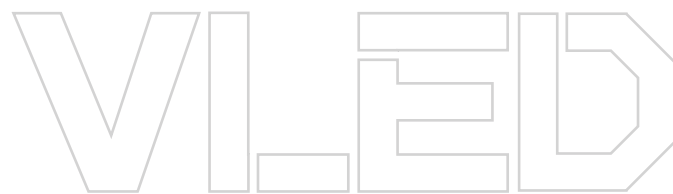
Power Consumption

- Less than 60W

Physical and Environmental

- IMB Dimensions (WxHxD): 295 x 35 x 278 mm
- Weight: 1.44 kg
- Operating temperature: 5°C to 40°C
- Operating humidity: 10% to 90%, non-condensing

10-meter VLED LED Screen



- **Shanghai CGV Cinema**

(Qingpu Sky Wanke Plaza Branch)

- **Wanda Cinema**

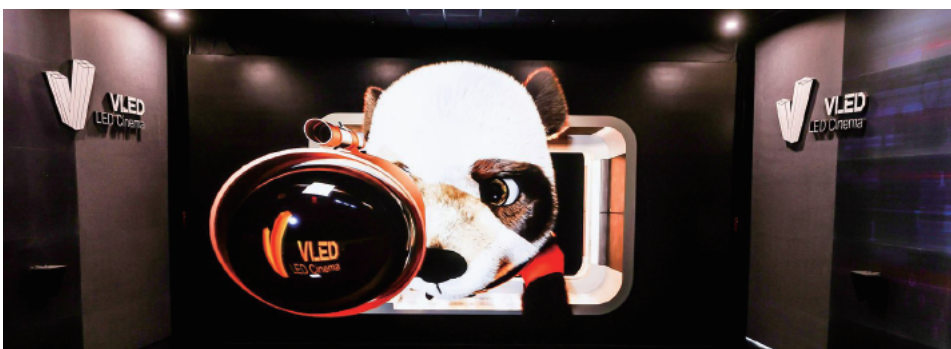
(Taiyuan Dragon City Wanda Plaza VLED Branch)

- **Tangshan Wanda Cinema**

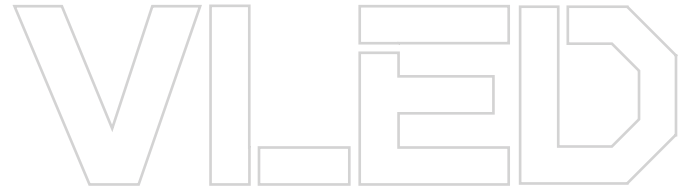
(Harbor Center Branch)

- **Wanda Cinema**

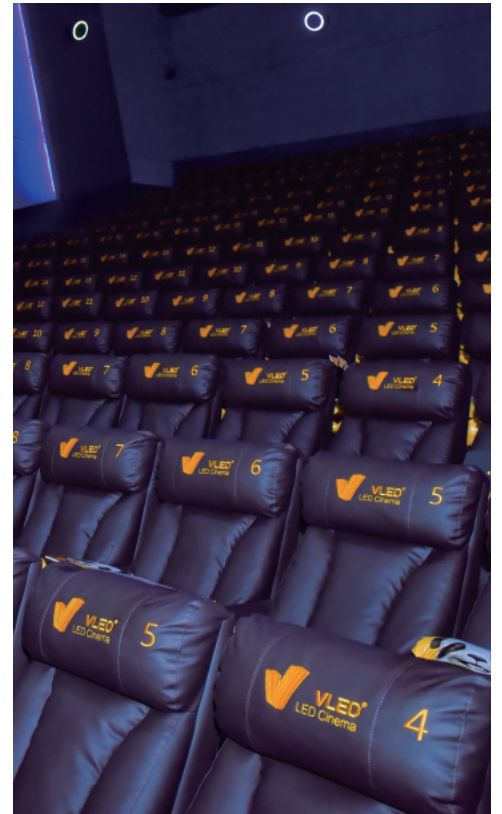
(VLED 219 Park Branch)



4K 14-meter VLED LED Screen



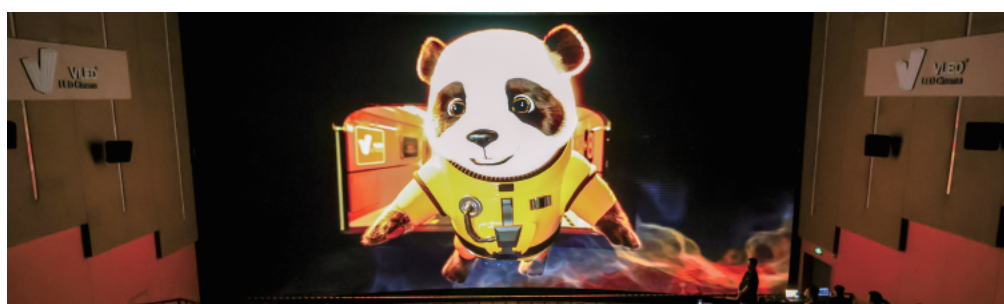
- Hai Kou Zhong Shi International VLED Cinema
- Hengdian Starlight Cinema
(Shiyan District)
- Zhengzhou Hollywood Cinema
(Jinyi Mall District B)
- Tianjin Southern International Cinema



4K 16-meter VLED LED Screen

VLED

- **Wanda Cinema**
(Wanda Plaza Shanghai Road, Changchun City)
- **Beijing Pinggu Wanda Cinema**
- **Xuzhou Suning Cinema**
(Pengcheng Plaza)
- **Dongguan Xing Hai Sheng Guang Cinema**

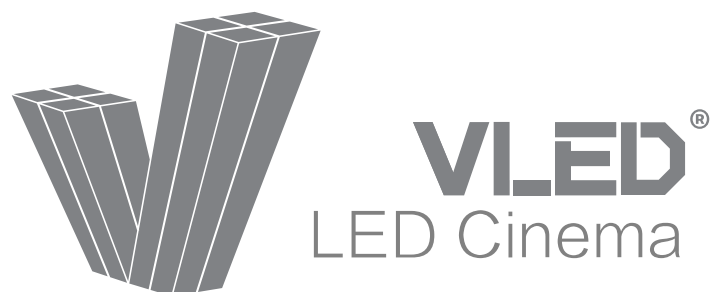


4K 20-meter VLED LED Screen

VLED

- **Wanda Cinema**
(Changping Wanda Plaza VLED Branch)
- **Platinum Elephant Sculpture VLED Cinema**
(in 77 Shopping Mall Branch)
- **Shenyang Seven Star International Cinema**





VISUAL AWAKENING

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Any question, please feel free to contract us.
Email: ALPDCINEMA@appotronics.cn

