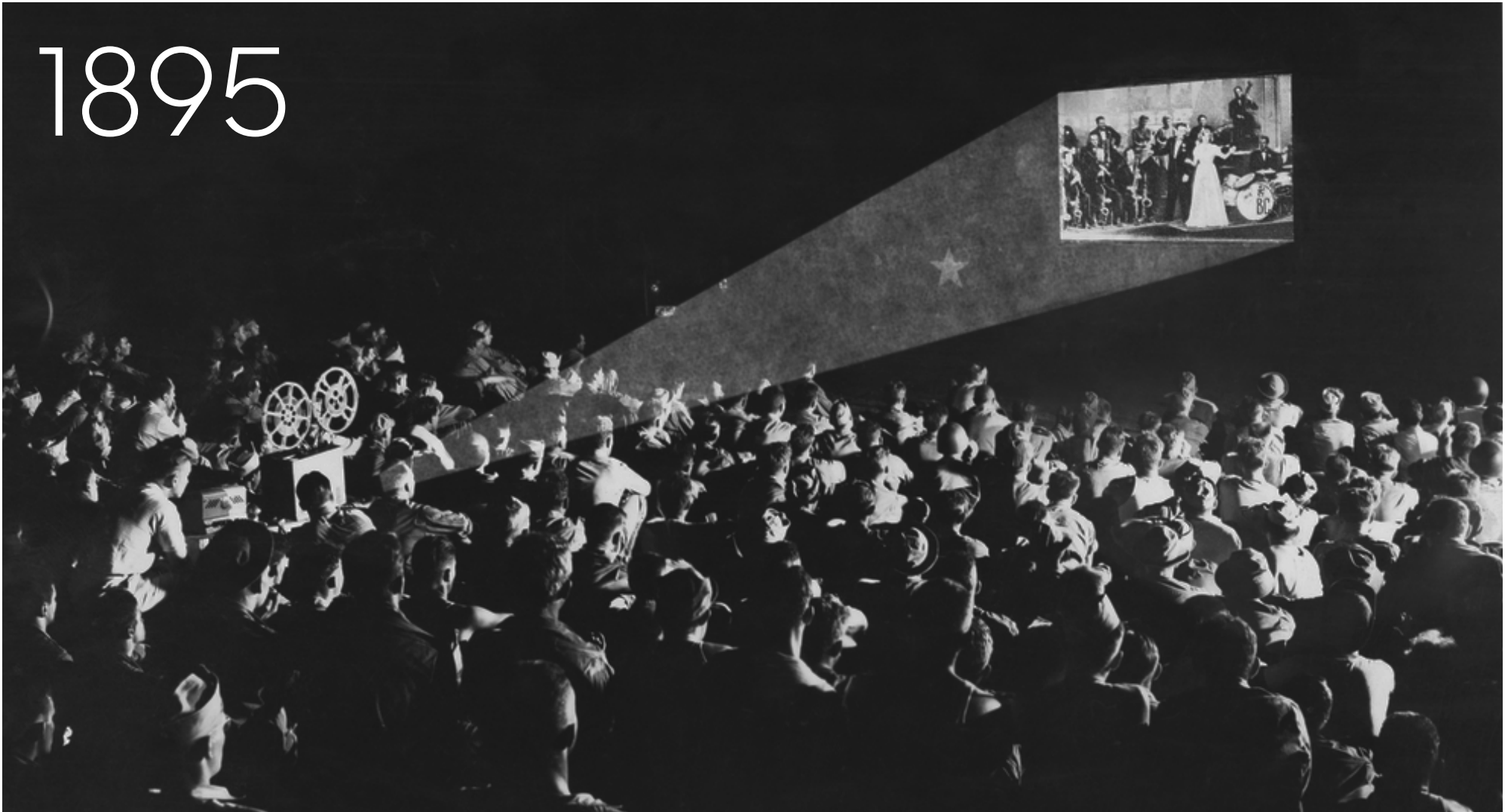


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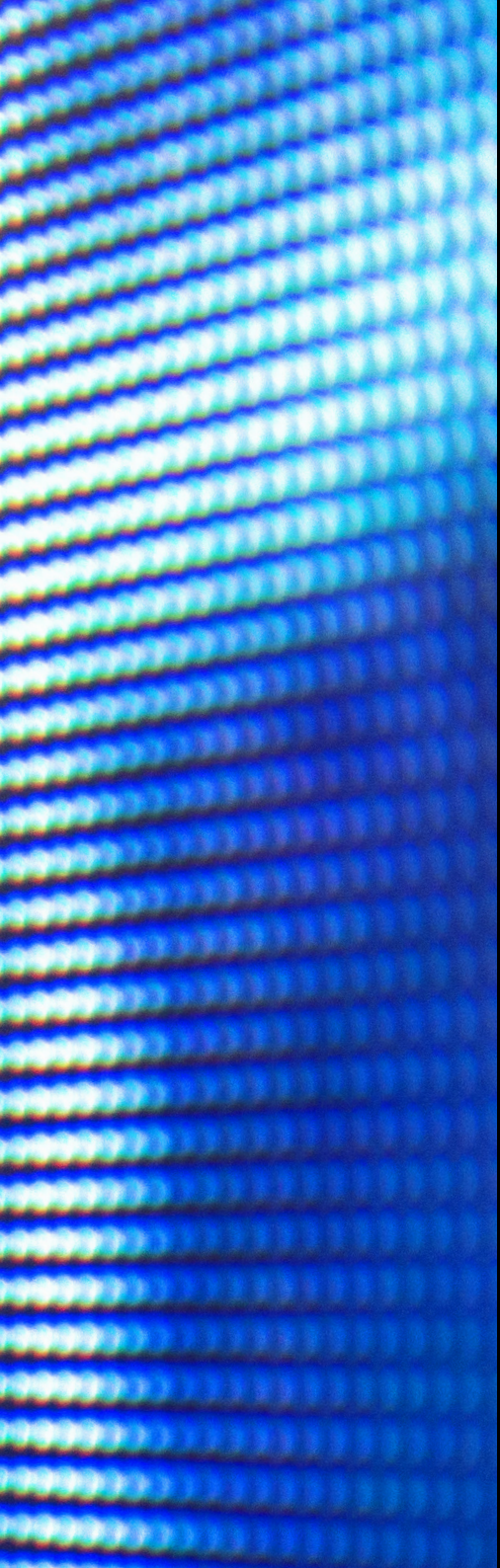
While today's movies feature the most advanced graphics and refined production techniques ever, outdated theater technologies can prevent them from appearing at peak quality. To showcase these pictures as intended, the cinema industry needs state-of-the-art cinema screen technologies more powerful and capable than the projector-based systems it has relied on for more than 120 years.

2017









## Samsung Innovation

Through a host of cutting-edge technologies, Samsung's visual displays transform the audience engagement experience in any setting. This commitment to innovation and improvement inspired Samsung to challenge long-held norms and drive change across the cinema industry. For Samsung, the "Cinema LED Revolution" begins with lifelike imagery and a viewing environment unlike any other.

The cinema of the future




Samsung is prepared to play a starring role in shaping the “cinema of the future” with its new Cinema LED Technology called “Onyx”. By introducing the visual power of LED picture quality to the big screen, the Samsung Onyx offers viewers more powerful, captivating and memorable content. The next generation of the cinema is now – step into the future.



Cinema LED Technology

Out of this world

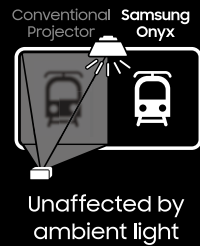
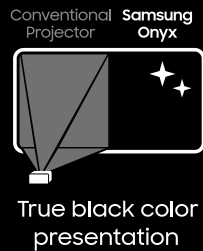


Inspired by the gemstone of the same name, the Samsung Onyx brand alludes to the display's ability to showcase cinema content with true black colors. Backed by brilliant LED picture quality and an infinite contrast ratio that brings out the best in these deep blacks, the Samsung Onyx delivers movie content like never before. Even 3D content appears more realistic and with unparalleled depth. With perfectly-tuned surround sound from HARMAN Professional, viewers can enjoy a multi-sensory experience that makes them feel a part of every scene.

For cinema content that is out of this world, trust the Samsung Onyx.



## Redefined Black



The Samsung Onyx translates true black color into next-level immersion. Through HDR picture refinement, viewers can enjoy more detailed, textured and visually-rich content that inspires a deeper connection. As the Samsung Onyx is unaffected by ambient light, it upholds consistent and distortion-free picture quality that keeps audiences engaged and furthers realism. In the Samsung Onyx theater, characters and places come alive and fuel imagination.





 **Onyx 3D**



## Extreme Reality



Unparalleled 3D depth



Conventional  
Projector

Samsung  
Onyx

Enhanced brightness  
and crisp details

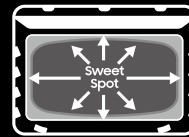


Clearly readable texts

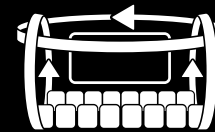
Just when you thought 3D movie content could not get any more lifelike, the Samsung Onyx takes realism to the next level. Featuring high-brightness picture technology, the Onyx works together with specialized 3D glasses to amplify visual details in every scene. Text becomes easier to read, and images appear as if in the front of the room.



## Perfectly Tuned Audio



Expanded sweet spot



Specialized tuning for  
LED screen



Powerful JBL speakers

Even the most visually-advanced pictures need quality sound to bring them to life. Samsung's Onyx Cinema LED technology amplifies next-level cinema content with JBL's sculpted surround sound audio. And with an expanded audio sweet spot, viewers in every theater seat can enjoy the same high-quality, multi-sensory viewing experience.

 Onyx SOUND

JBL



## Expanded and Modern Theater

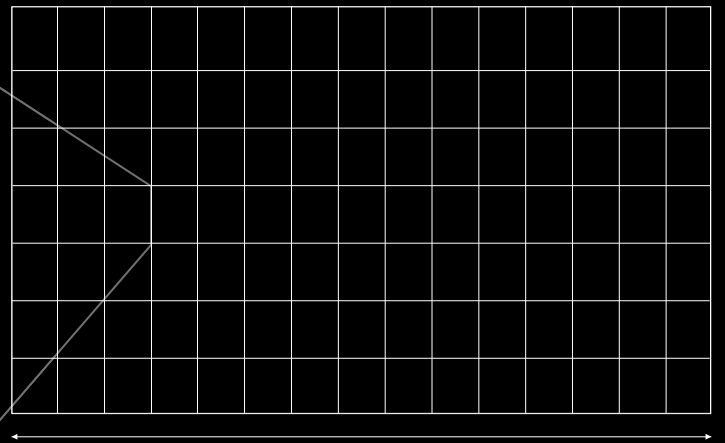
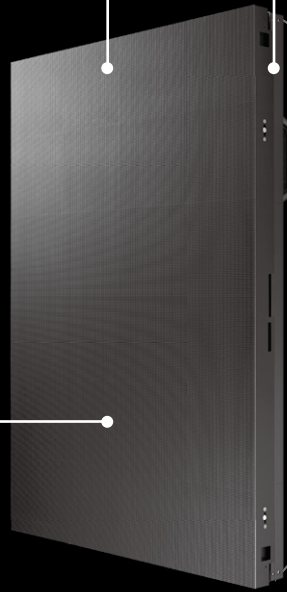
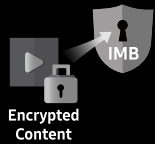
The Samsung Onyx makes the modern theater feel bigger and better. By eliminating bulky projector equipment, theaters can include more seats and offer content to wider audiences. And with a light-resistant design, cinema operators no longer have to worry about interference or disruptive distraction.

2.5 Pixel pitch LED diode

Aluminum

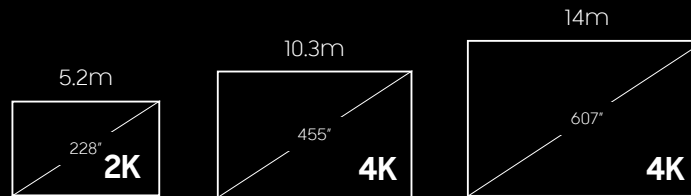
4096 x 2160 pixels to satisfy scope ratio(2.39:1) and flat ratio(1.85:1)  
4K (96 cabinets / 2304 modules)

All-in-one locking system



2160 Pixels,  
5.4M(17.7ft)  
6 Cabinets

4096 Pixels, 10.3M(33.8ft) 16 Cabinets





Specification	Samsung Onyx		
	Per Cabinet	Per Screen(96 Cabinets)	Remarks
Size(WxH)	640x900(mm), 23.6x35.4(inch)	10,240x5,400(mm), 33.8x17.7(ft)	
Weight (Kg)	14.2 kg	1,440kg	Support frame not included
Resolution (WxH, Pixel)	256 × 360	4,096 × 2,160	
Aspect ratio	0.71:1	Flat(1.85:1) / Scope(2.39:1)	Flat: 3,996 × 2,160 / Scope:4,096 × 1,716
Cabinet Construction	All aluminum construction	All aluminum construction	
Brightness (Nomal / Max)	14fL(48nit) / 87.56fL(300nit)	14fL(48nit) / 87.56fL(300nit)	Support up to 146fL(500nit) at Custom mode
Power Consumption-Max/Typical	120 / 39 W	11.52 / 3.74 kW	Cabinets only
Heat Generation-Max/typical	66.1 / 21.5 (BTU/SF per hour)	66.1 / 21.5(BTU/SF per hour)	
Working Temperature	0-40°C (32-104°F)	0-40°C (32-104°F)	
LED Lifetime	100,000 hours	100,000 hours	
Bit Depth(Gray Scale Intensity)	16 bit		
Refresh Rate	3,072 Hz		
Input Power Range	100-240 VAC, 50/60 Hz		
Power Consumption-Max/Typical	120 / 39 (W/Cabinet)		
Heat Generation-Max/Typical	66.1 / 21.5 (BTU/SF per hour)		
ESD(Electro-Static Diode)	Applied to bottom row of screen		
Certification	DCI (Digital Cinema Initiatives)		
Service	Rear Service		





# SAMSUNG

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**Samsung Onyx**

For more information about Samsung Onyx, visit [www.samsung.com/business](http://www.samsung.com/business) or [www.samsung.com/displaysolutions](http://www.samsung.com/displaysolutions)

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2018-04