

Fact Sheet



Spectra

Introduction

Step into majestic wonder and be awed by *Spectra*, a free, nightly, 15-minute performance that features laser, light, water movements and graphics, set against the backdrop of Marina Bay Sands.

Launched on 2 June 2017, *Spectra* is set to an original orchestral soundtrack composed by Singaporean music producer and composer Kenn C., with the involvement of local and international visual media artists and cutting-edge technology. Since its debut, *Spectra* has entertained more than a million spectators at the Event Plaza.

A world-first, this state-of-the-art multimedia experience at the Event Plaza is dramatic in scale and unique in style. The crown jewel is a 12-metre high laminated glass-and-stainless-steel prism that bursts to life in tune with the music and lights throughout the show. Lasers beam down nightly from the pinnacle of Marina Bay Sands, connecting to the prism as it sets off water jets, spectacular lights and lava effects. The multimedia experience can be viewed 50 meters across the waterfront promenade, complementing the stunning nightscape of Marina Bay.

The show performs every night at 8pm and 9pm (Sunday to Thursday), with a third show at 10pm on Friday and Saturday.

Fast Facts

- Built in collaboration with Australia-based experience design agency Imagination, the show utilizes a huge selection of water fountain techniques, including pyramids, gyroscopic, archs and straight jets, as well as lava and mist effects.
- It features a brand new soundtrack composed and remixed by award-winning producer and music arranger Kenn.C. Born and raised in Singapore, Kenn is a veteran in the regional pop music scene, having worked with A-list stars such as Stefanie Sun, A*mei and Jacky Cheung.
- A production that is two years in the making, the show is a world-first, anchored by a 12 metre high laminated glass prism that forms the “heartbeat” of the show.
- *Spectra* follows a story arc that reflects Singapore’s journey as a multicultural society into the cosmopolitan city she is today. The visual imagery used is a metaphorical representation of Singapore society and its complex, deep-rooted history and cultural background (Acts 1 and 2). A forward-looking theme, involving images of a futuristic city, aims to inspire the audience to strive for a better Singapore (Acts 3 and 4).
- The versatility in the show’s technology has allowed *Spectra* to be used in special events, including a specially-themed Star Wars: The Last Jedi light and water show which adapted *Spectra*’s lasers, light and water movements with movie visuals, all set against the iconic film score.

The Technology

- *Spectra* sets itself apart from other light and water shows because of its diverse range of water fountain techniques, and its use of new underwater 500 watt LED fixtures – specially developed for the show - that allow the lights to show perfect whites and richer colours.
- In total, *Spectra* uses more than 110 types of lights and lasers.
- The show also uses state-of-the-art technology, including a synchronization software called timecode, so that the soundtrack will be able to trigger, millisecond by millisecond, all of the lasers, lighting, projections and water effects in perfect harmony each time.
- Lighting positions were carefully chosen to give the maximum effect in conjunction with water, laser and projection effects. The lights are positioned on specially created floating pontoons as well as additional projection screen barges located around the bay area.
- Low power, high-output beam lights are used above water for maximum impact. To keep these lights safe from outdoor elements, each light is individually enclosed in a special case called eco-domes which keep it dry and protects the equipment from the sun's UV rays during the day.
- The lights used are energy efficient, with the main lighting fixture able to produce a light output similar to a 4,000 watt search light, even though it has a small unit output of energy at 470 watts.
- The glass prism sits atop a polished stainless steel skeleton which is submerged underwater. As it sits submerged, the water can reflect all over the prism's exterior for an additional effect. Stainless steel is also used for the structure to withstand outdoor weather conditions and for its ability to reflect light.
- The prism is able to cast a colour hue onto an object up to 50 metres away.
- The show has an improved high-powered and full-range sound system for playing back both show audio and events. Three primary loudspeakers are positioned on the water fountains in the bay, with side and rear speakers mounted on either side and behind the audience for a more immersive audio experience.