

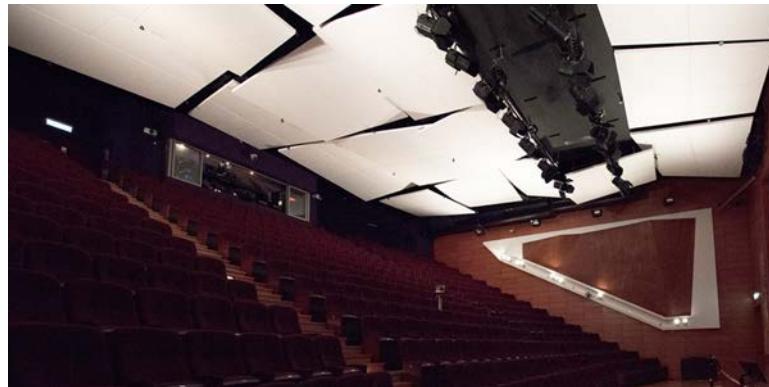
# Rosco Case Study

A story from the [Rosco Spectrum Blog](#)



## Braq Cubes Light Up The House – From Below

Lu Kao Hwa Theater is located in Hong Kong's International Christian School and is heavily used as the center of spiritual and cultural life on campus. The theater is not only the venue for multiple choral, orchestral and concert band performances, but it's also used for the school's day-to-day assemblies and meetings, as well as weekly chapel services with a contemporary worship experience. That means that the lights inside the theater are powered on almost all of the time.



In an effort to save on energy and maintenance costs, the school decided to replace their house lights with more efficient LED fixtures. The issue this theater has with house lights is that the entire ceiling is covered with soft acoustic ceiling panels. The existing house lights were originally fourteen 1000W halogen cyclorama lights that reflected off the ceiling and also skimmed the side walls. The CYC lights were contained in a recess just above eye height running parallel to the slope of the seating. This configuration, consequently, produced a significant amount of glare issues for the audience. The school's goal was to find an energy-efficient LED solution that could illuminate the space just as well as the CYC light while reducing the glare into the house.



Hugh Chinnick of Pacific Lighting, Rosco's dealer in Hong Kong, proposed the creative solution of using Rosco Braq 4C LED fixtures. His idea was to focus one light on each of the light-colored acoustic ceiling panels and use them as soft reflectors to create evenly diffused light throughout the whole space. The school ended up replacing the fourteen existing 1K CYC lights with 20 of the 100W Braq Cube 4C fixtures in white housings that were mounted on our Rosco Track. The white fixtures blended into the aesthetics of the theater wonderfully and the Rosco Track provided an elegant way to install the lights without the usual mess of power and control cables.



## Cost Savings

The theater's power and maintenance savings have been significant. Not only have they gone from 14,000W to 2,000W of total power consumption, but the Braq Cubes generate significantly less heat than the 1K CYC lights did. Because the venue is used so often, and the lights are always on, the ambient temperature in the theater is noticeably lower and the school isn't running the air conditioning as often. In addition, because the CYC lights were always on, the lamps were burning out frequently. Thanks to the Braq Cubes, the school isn't spending time and money changing out 1K lamps either.



## Improved Illumination

The original CYC house lights reflected off both the ceiling and the side wood paneling. This created unwanted coloration in the light and uneven illumination of the house area. In the new design, light is only reflected off the white acoustic panels on the ceiling to produce a more homogenous area of light in the house. Each Braq Cube fixture comes with a set of three spread lenses, allowing them to tailor the beam spread for each acoustic panel. This, combined with Top Hat accessories for the Braq Cubes, allows the theater to control the light more effectively for brighter house lighting with less glare.



## Versatile Solution



The Braq Cube 4C fixtures are RGBW, color-mixing fixtures that blend to a very attractive white light. While Rosco also offers the Braq Cube WNC, which is a variable color temperature white light LED fixture, the theater preferred the warmth found in the white light output produced by the 4C units. In addition, they can easily change the color of the house lighting to match the mood on-stage of the auditorium for performances.

*Paul Wilson, the Theater/Arts-Technology Coordinator for the Hong Kong International Christian School, reports that he's had "very positive comments about the improved brightness and even coverage of the lights," and that "the students love the ability to change the colour of the house lights to match the mood of the evening."* Be sure to visit the Braq Cube 4C web page for more details on this versatile fixture for your next house light project.