



< Project Gallery

Lim Kim Hai Electric

Established over sixty years ago, Lim Kim Hai Electric has risen to become Singapore's premier distributor of electrical, control, lighting, safety, and industrial solutions, as well as e-mobility technologies. The company's headquarters in Kallang, which serves as a hub for various enterprises within the LKH Group, recently underwent significant renovations to update and modernize its commercial facilities.

The Lighting Design

The goal was to craft an inviting atmosphere that would appeal to the incoming generation of professionals while paying homage to the rich heritage of the group. To achieve this, a new lighting design aimed to seamlessly integrate elements of biophilic design and human-centric lighting, revitalizing the workspace with a contemporary touch. When it came time to rejuvenate the area, **Light Journey**, another esteemed member of the LKH family, took charge of designing and supplying the lighting fixtures.

Kerri Iha, Lead Generation Specialist at Light Journey, shares:

"Level 4 of the LKH Building housed a now-defunct showroom, and the space was left deserted. Our colleagues utilized the space as best we could, occasionally having lunch in some corners. However, a total renovation would ensure that the entire space could be utilized. With an increase in in-house training for internal staff and external events occurring on the premises, we also required a larger seminar hall to host these activities, as well as provide space for flexible work. Because this area would serve multiple functions, we needed multiple light settings to accommodate the needs of its occupants."

Project Objectives

The new lighting system required intuitive controls, including scene-setting capabilities, a timer mode, and the flexibility to modify settings through mobile devices or manual switches. Most of all, it needed to offer easy interoperability.

"Our vision was for 'connected lighting,' reflecting our [Light Journey's] role as a distributor of various brands. It was essential for the different brands integrated into the renovation to function seamlessly together."

The Challenge

One of the main challenges faced during the renovation was dealing with the existing wiring infrastructure, which in some cases, dates back to 1979. The sheer volume of wires and cables presented constraints, especially when looking to integrate dimming controls. Moreover, converting a deserted showroom into a multifunctional space demanded adaptable lighting solutions capable of addressing diverse requirements. Additionally, the lighting design had to compensate for the absence of natural daylight in certain areas.

The Solution

Casambi's wireless lighting control system overcame the wiring constraints. In the seminar hall, all the lighting units came with Casambi Bluetooth Modules already embedded to facilitate wireless connectivity. Additionally, selected light fixtures in the exterior areas were retrospectively outfitted with Casambi Bluetooth Units. All fixtures were pared, configured and controlled from the comfort of mobile devices.

The Casambi app allowed for the creation of dynamic ambiance-enhancing lighting scenes to suit every need. For example, the lighting design incorporated a stretch membrane that dynamically adjusts color temperature to mimic the nuances of natural daylight. And in areas lacking natural light, artificial skylight features have been seamlessly integrated, contributing to a harmonious and inviting atmosphere.

"For the seminar hall, each lighting unit was equipped with a Casambi chip by the manufacturer, enabling us to easily establish wireless control connections. In the outside hallway areas around the seminar hall, we fitted Casambi modules into the chosen light fixtures ourselves."

Overcoming implementation challenges

Initially, controlling the lighting through mobile phones led to complications as too many users had access, resulting in lights often being left on. A timer wasn't a viable solution since departure times varied daily. To solve this, wireless switches were retrospectively introduced for manual control, reducing dependence on mobile devices and enhancing both user experience and energy efficiency.

"In the seminar hall especially, the portable, battery-powered wireless switch offers convenient control for presenters, eliminating the need to traverse to the rear of the room every time to operate the lights."

Results & Benefits

The incorporation of Casambi control resulted in significant reductions in cabling requirements, leading to cost savings and streamlined installation processes. The rich functionality and intuitive interface of the Casambi app have contributed to the transformation of this office into a vibrant, adaptable, human-centric space, enabling multiple lighting settings customized for different activities. Additionally, the compatibility with all brands and the later integration of wireless switches has demonstrated the system's future-proof nature and ability to adapt to evolving needs both now and in the future.

[Twitter](#) [Facebook](#) [LinkedIn](#) [Email](#) [Share](#)

Site

Lim Kim Hai Electric Office

Location

Kallang, Singapore

Lighting Design

Light Journey

Interior Design

Raw Design Consultants

