SHOWCASE

COEX Expo 2020 Arrival Hall

Dubai, United Arab Emirates

Arguably the biggest exhibition ever to be held in the United Arab Emirates till date, Expo 2020 hosted over 24.1 million visitors from 178 countries between 1st October 2021 to 31st March 2022 despite being delayed due to COVID-19 restrictions. World Expos were introduced over 170 years ago with the sole purpose of showcasing the latest innovations from across the world. When United Arab Emirates won the bid for Expo 2020, every effort was taken to ensure it was the most spectacular Expo till date. Expo 2020 brought the world together, and lived up to its slogan "Connecting Minds, Creating the Future". Connectivity for this event was topnotch despite the phenomenal number of visitors. The Dubai Metro was also extended with a special 'Red Line' for Metro users to gain direct access to Expo 2020.

Right at the Metro entrance to Expo 2020 is an eye-catching 60 metre long canopy that was designed by global architectural studio Woods Bagot featuring 'chainmail' by New Zealand innovator Kayne Horsham. Award-winning architect Kayne Horsham who is the Founder at Kaynemaile, is best known for designing the film sets and the chainmail garments worn by Aragorn, Gimili and the hundreds of Orcs in Lord of the Rings and then getting inspired to recreate a patented injection molding process to mass produce lightweight polycarbonate chainmail that has revolutionized architectural design. The canopy was dubbed 'WonderCool' as it not only delivers a dramatic and kinetic aesthetic but also shields visitors from desert heat as they await entry.

"We've been delivering creative architectural solutions at scale for projects all over the world for the past 20 years, which are all created and made right here in New Zealand, but the opportunity to be part of Expo 2020 in such a significant way was a major milestone for us." – Kayne Horsham (as mentioned on kaynemaile.com).

The arrivals hall canopy is comprised of 55 overhead kinetic mesh screens running the length of the 60m-long structure, using a total of 12,000m2 of Kaynemaile's patented mesh, which is manufactured at Kaynemaile's workshop in Wellington (New Zealand). The insulating three-dimensional mesh structure means a high proportion of the mesh surface area is always in shade, giving a cooling effect as the air passes through the cross-sectional open area. It significantly reduces both radiant and thermal conductive heat from entering the building envelope by up to 70%. International lighting and systems design firm CD+M Lighting Design Group partnered with Kaynemaile to light up the structure. As the assigned lighting design firm, CD+M was tasked to introduce colour-changing lighting to the canopy that needed to be programmed to dynamically change through the course of the day. During working hours, the lighting ushered visitors into Expo 2020, and by evening, indicate the way out.

The Traxon Nano Linear Allegro RGBW with 50deg Beam Angle was used for this project, which was controlled by the e:cue Butler S2 and Lighting Control Engine 2.

"The selection of Traxon e:cue products to highlight this unique feature came as no surprise to us. The quality, performance, and color hues the product offers made the choice of equipment easy. The local support of Traxon e:cue team helped us to build successful mockups and guarantee the results prior to the final installation, which is something we couldn't risk for this exceptional project. We are proud of the outcome and pleased with our selection of Traxon e:cue."
– Waleed Fakousa (Principal, CD+M Lighting Design Group).

"To make Expo 2020 Dubai the spectacular show that it was, only the best and most eye-catching innovations from across the globe were selected. The 'Wonder Cool' canopy at Dubai Exhibition Centre (DEC) was one of the highest visibility areas due to its close proximity to the high-traffic Metro Red Line. It was not only functional, but a work of art thanks to the innovative architecture and the breathtaking use of the colourful lighting by Traxon e:cue that was programmed to usher visitors in and out, as well as enhance the overall look and feel of the structure after dusk."
– Sethu Menon (Senior Vice President for Venue Operations, Dubai World Trade Centre).

Featured Products

Nano Linear Allegro RGBW Beam Angle

Butler S2

Lighting Control Engine 2

Project Details

Category: Canopy Lighting

Location: Dubai
United Arab Emirates

Client: DWTC

Featured Products: Nano Linear Allegro RGBW Beam Angle, Butler S2 and LCE2

Main Contractor: ALEC Engineering and Contracting

Architect: Woods Bagot with chainmail by Kaynemaile

Design Consultant: WOODS BAGOT

Lighting Design Firm: CD+M Lighting Design Group

Completion Date: 20 February 2021