



Wadden Sea Centre Takes Flight with XIM Gen4

About the Wadden Sea Centre

The Wadden Sea is a UNESCO World Heritage site that stretches 500 km along the coasts of The Netherlands, Germany, and Denmark. It is a biologically rich, dynamic land and seascape that is a rich habitat for birds, seals, porpoises, dolphins, and crustaceans, many of them regionally endangered.

The Wadden Sea Centre (WSC) is a new facility, completed in 2016 and located in Ribe, Denmark, literally on the beach of the Wadden Sea. The Centre is a museum between land & sky that communicates the astonishing story of 15 million migratory birds that use the preserve to feed and rest during their long journey across continents.

Migrating Birds Exhibit

The Centre's new exhibition "The Wadden Sea - 15 million birds migrating" is a journey through the landscape of the Wadden Sea -- an incredible, aesthetic, fairytale exhibition about The Wadden Sea as seen through the eyes of migratory birds.

A beautiful staging area begins the visitors' journey with the birds. We see their lives in the Wadden Sea, and we follow them up in large swarms into the sky.

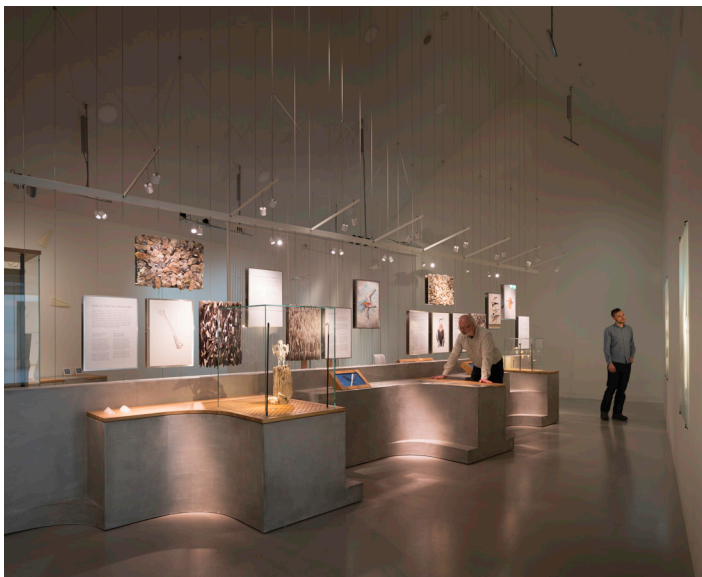
Plain white walls and exhibits provide a perfect canvas for gel-tinted, pastel lighting and multimedia projection, creating a wonderfully soft but dynamic environment for contemplation, study, and even entertainment.



JAC studios in collaboration with Jason Bruges Studio and No Parking created the exhibition in harmony with the special nature of migratory birds, and the design creates a balance between communication and aesthetics that is unique in its field.

The Lighting Design

Fortheloveoflight.dk provided lighting design for the exhibit, creating with the architect a new design and structure that inhabits the space as an integrated design element, without being technically imposing. "Birdbeamers" is as much architecture as it is lighting – a visually simple and flexible low voltage lighting system with bespoke luminaires that becomes an integral design element in the exhibit. Birdbeamers clamp to the rig for easy mounting and focusing.



Of course, the first requirement was great quality light. After that, Fortheloveoflight needed a lighting control system that provide individual light control with deep, smooth dimming that was simple to set up and simple to use. For this, they chose Xicato XIM Gen4 Artist Series.

To manufacture the bespoke fixtures, the designers chose Mike Stoane Lighting in the UK, which has a long experience with the XIM and with museum work.

The selection of Xicato started at the PLDC in Rome in October 2015. Rickard Lundell of Rebel Lighting in Denmark brought Nikolaj Birkelund, lighting designer at Fortheloveoflight, to the Xicato stand to show him the new Xicato Intelligent Module (XIM) that was evolving from its origins as 1-10V and DALI to Bluetooth® wireless control. Nikolaj was impressed by the ease of commissioning and simple, individual light control, and was determined to use what came

to be known as XIM Gen4 in the Wadden Sea Centre, which was still in the planning phases.

Nikolaj received one of the first XIM Gen4 samples. Upon visiting the Xicato booth at the Light+Building show in Frankfurt in March, 2016, and seeing an extensive demonstration of its capabilities, he and the architect agreed to be a beta site for the product.



The first product was delivered in September and installed in early December, 2016, when the facility was ready. During the installation, Xicato demonstrated the sensor and Beacon functionality of XIM Gen4, which has made them think again and will be used for future development.

Nikolaj was sold on the Xicato XIM Gen4 based on its ease of commissioning and control, and its potential to integrate the museum lighting with the immersive multimedia experience they were planning for visitors.

"It was essential for the final result to work wirelessly and dynamically with the lighting design during commissioning."

- Nikolaj Birkelund, Lighting Designer, Fortheloveoflight

More than Lighting

Beacons

But the XIM Gen4 offered so much more.

XIM Gen4 comes with integrated Bluetooth beacons – iBeacons, URI Beacons and Alt Beacons – that can add depth to the information provided in the exhibits themselves. User apps can detect the presence of beacons and provide multimedia information that deepens their understanding of the exhibits next to them, immersing them in a virtual world of migrating birds and tidal flats.



Operations Management

Wadden Sea Centre was among the first to test the Xicato Intelligent Gateway (XIG), which officially launched in April 2017. The XIG creates an intelligent Bluetooth network that is connected to the Centre's MediaLON local area network that controls its multimedia projectors and audio, and serves as the building management system (BMS).

With XIG, WSC facilities managers can not only control the lights, but also get real-time feedback on light status – data such as intensity, temperature, power consumption, input voltage, and operating hours. The availability of this data allows them to ensure that everything is working exactly as desired, and to conduct proactive maintenance if, for example, a power supply is failing on one of their tracks.

Ready for the Future

XIG and XIM Gen4 also ensure that the Centre's intelligent lighting network is future proof. XIM can be programmed to respond to any combination of sensor or command inputs, allowing lighting to respond to everything from occupancy, to ambient light level, to mobile commands, to commands sent by the XIG in coordination with multimedia programming. And both are field upgradeable to the Bluetooth Mesh standard expected in the second half of 2017.



"The XIM Gen4 is amazing!", exclaimed Rickard Lundell of Rebel Lighting when he saw a demonstration "I have been in lighting controls for many years, and the instant response, flexibility, and ease of commissioning of Xicato's solution is light years ahead of anything else I have seen."

Wadden Sea Centre Equipment

Xicato LED Lighting Modules

XIM Gen4 Artist Series

- XIM19953013A6A: 19mm, 3000K, 1300LM, BLE+1-10V
- XIM19953020A6A: 19mm, 3000K, 2000LM, BLE+1-10V

Xicato Intelligent Gateways (XIG)

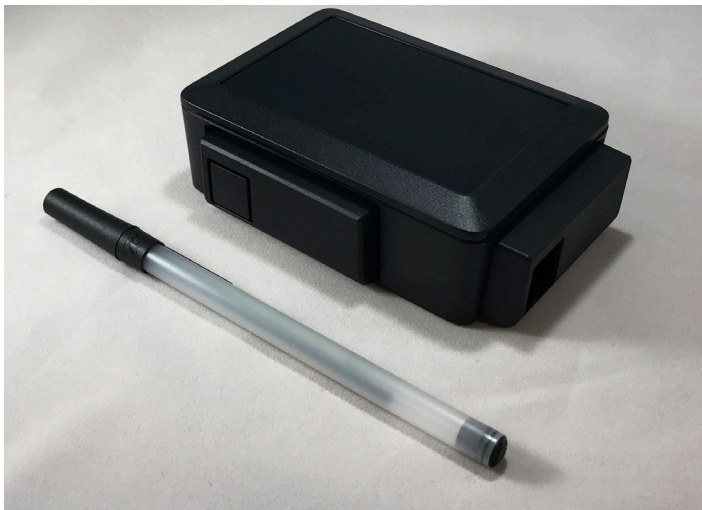
- XIG-0101 Xicato Intelligent Gateway

Software

- Xicato Control Panel (commissioning)
- Medialon (building management and lighting control)



XIM is available in 19mm and 9mm LES, in multiple spectral/CRI formulas and CCTs, and lumen output from 700LM to 3000LM, with Bluetooth®, DALI, and/or 1-10V control.



Xicato Intelligent Gateway (XIG-0101) provides range extension, remote monitoring, configuration and control access, and protocol conversion between Bluetooth and IP based protocols such as HTTP and Medialon.

Exhibition Team

JAC Studios

www.jacstudios.dk

No Parking Productions

www.noparking.dk

Jason Bruges Studio

www.jasonbruges.com

Luminaire Design

JAC studios

Fortheloveoflight

www.fortheloveoflight.dk

Lighting Design

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Nikolaj Birkelund, Lighting Designer

Luminaire Manufacture

Mike Stoane Lighting

www.mikestoanelighting.co.uk

About Xicato

Xicato designs and develops light sources and electronics that enable architects, designers and building managers to create beautiful, smart spaces in which people love to live and work. With thousands of installations around the globe, Xicato continues to be a leading supplier of high quality lighting solutions. Xicato is defining the future of intelligent light sources by integrating electronics, software and connectivity.

Founded in 2007 and headquartered in Silicon Valley, Xicato has offices in China, Japan, Europe and the US.

For More Information

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