

# • Watch the Lighting Designer's testimonial video

When <u>Diebold Nixdorf (DN)</u> wanted to create a transformative virtual experience for their banking and commerce customers, they turned to <u>AMBIA Lighting Design</u> founder, Amanda Bennett, to help design their customer experience center at their new international headquarters in Cleveland, Ohio. Amanda turned to Kelvix to create a linear LED lighting solution to help the DN sales teams demonstrate their data-connected software, security, and hardware solutions.

"When I was looking at LED lighting manufacturers, <u>Kelvix really stood out</u> because they were very collaborative, creative and open to exploring various ways to implement our ideas," she said in a recent interview with the Kelvix team. "That kind of open, solution-oriented spirit was exactly what we needed to be able to work with the DN team, sell the idea to the owner and ultimately get it installed in the way that we envisioned."

#### Location

Cleveland, Ohio

#### **Lighting Designer**

Ambia Lighting Design

#### Agent/Rep

Lighting and Controls, Inc.

## Specifier

Amanda Bennett, Ambia Lighting Design

#### Distributor

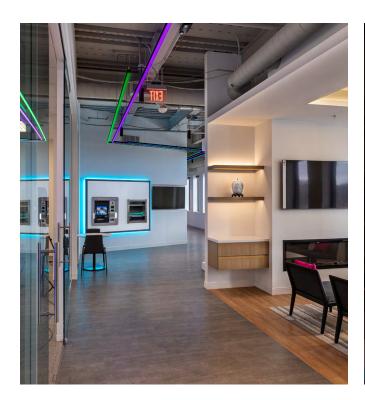
Mars Electric

#### Photography

David Panton, Kelvix

The Challenges







# Creating the Linear LED Lighting System

Diebold Nixdorf wanted to use lighting color and motion to show how their customer data travels between DN's secure software solutions and their drive-up ATMs and wall-mounted ATM machines. Amanda knew that linear LED lighting could make her client's vision a reality, but she had never worked with LED pixel tape before.

One of the biggest design project challenges was navigating the capabilities of the LED lighting control system. The system Kelvix and Amanda were creating was very robust for a variety of lighting shows, but the complexity of the <u>lighting controls</u> meant that the AMBIA team had to decide how much they wanted to share with the client. They needed to help the client navigate multiple options without them becoming overwhelmed by the controller technology.

"We needed Kelvix to help us choose and develop the screen information to be included in the app, and show us exactly how that would look, so that the controls would be very intuitive and simple for our client on the application side," Amanda said.

She was also concerned about achieving a smooth LED lighting transition to create various lighting shows. Any pixelation in the lens could disrupt the lighting transition that Amanda needed to achieve the design intent.



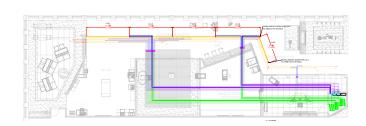
# Meeting the LED Lighting Design Intent

"Since we were looped in at the very inception of the project, we were able to provide Amanda and Diebold Nixdorf representatives the documentation and recommendations for every iteration from the initial design to the final installation, to make sure we were meeting their design intent," says Kelvix Senior Applications Engineer, April Allain.

"We were able to show them what the Kelvix products and custom solutions would look like in the space, along with recommendations on how the control units would be placed. This way they could see how the final installation would come together from both a technical and design point of view. From CAD drawings to video renderings, we were able to show them, from version A to the final installation, what the lighting would look like in real-time in their service center — even as it was still being installed."

First, the Kelvix Applications Engineering Team quickly went to work to develop a user-friendly controls solution for the complex LED lighting system that included 450 feet of linear LED tape that would be mounted on the ceiling and transferred down to the wall.

To avoid lighting pixelation in the LED lens, the Kelvix team implemented the ability to control the changing light colors down to 4-inch increments, for a seamless transition between various lighting shows for DN's virtual sales demonstrations.





"Kelvix provided so many samples and videos during the design process. So as far as hardware and what the product would look like onsite, I felt very comfortable and knew exactly what to expect."

Amanda Bennett, AMBIA Lighting Design founder



"I was really thankful to Kelvix for what they did to put together screenshots and talk us through exactly what that setup would look like before it was implemented onsite,"' Amanda said. "They developed an easy-to-use application piece that allows the owner to go through various lighting shows and make modifications as needed onsite. It ended up working out very well."

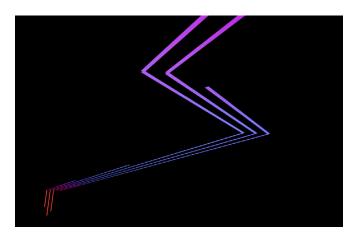
Amanda was especially impressed with how the Kelvix Applications Team created numerous video mockups internally to walk Amanda's team through how the linear LED lighting would work, including several video demonstrations of possible lighting shows.

"All this was done in advance of the actual lighting programming and onsite implementation," she said. "Those components helped us understand what we would ultimately have by showing us what the solutions could be, and they really helped with the collaboration and the vision for where this project could ultimately land."



The Solution

See what a Kelvix custom lighting program looks like in this real-time rendering











# Bringing the Designer's Customer Vision to Life

According to Amanda, the Kelvix LED lighting solution was different from many lighting designs that usually involve extensive troubleshooting on the controls side of the process. She knew that there were several controls programming challenges, given the complexity of the linear LED lighting system. But because Kelvix had already addressed these challenges and solved them internally, Amanda and her team did not have to do the troubleshooting themselves.

"The piece that exceeded my expectations for this project was the programming component," Amanda said. "I was able to show up and everything had been worked out. I literally just watched the shows we had just talked about during design. Kelvix had done all the troubleshooting and coordination behind the scenes."

Most importantly, the unique Kelvix lighting solution empowered Amanda and her team to bring her client's vision to life for the new DN customer experience center.

Now that the design project is complete, Diebold Nixdorf has the ability to walk their clients through the customer experience — visually tying the concept of data transfer to their sales presentation. The specialty LED lighting fixtures will be engaged at specific stops along the customer tours and will visually demonstrate the communication and data transfers that occur within DN's connected banking and commerce systems.

The Diebold Nixdorf project is just one example of how every Kelvix lighting solution is backed by an entire Applications Engineering team, along with project managers at the designer's disposal, even before placing a single order.

Learn how Kelvix can develop a lighting solution to make your job easier by visiting our <u>Services page</u>.

We're at your service, at little to no cost to you.

Products Used





"I am very impressed that there was no troubleshooting onsite that I was involved with. Typically I expect that. For this project I was able to show up and see the lighting shows that we had discussed and envisioned. They looked beautiful without issues on my end. They were able to take care of everything."

Amanda Bennett, AMBIA Lighting Design founder



These digital (chasing) LED strips allow the user to address small sections individually. Using DMX, Digital Pixel allows nearly unlimited control and programming capabilities.

# Product features:

- Independently controllable every 3 pixels
- 90+ CRI
- Dimmable
- 50,000 hour lifespan
- UL-listed for indoor use
- 3M™ industrial adhesive backing
- For use with electronic power supplies
- Available with simple RF controls with various pre-programmed scenes

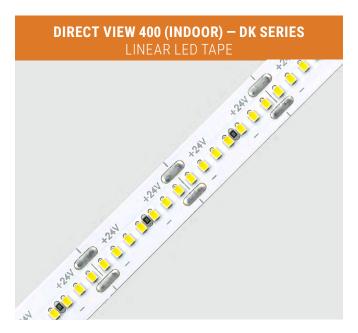


# Product features:

- 1.375" x 1.375"
- Available in 2-meter section
- Extruded aluminum construction
- Anodized matte finish
- Available with a white or frosted lens



# **Products Used**



Direct View 400 is a technological advancement in linear LED lighting. Even in the smallest microchannels, it can deliver even illumination without visible diode impressions.

# Project feature:

3500K

#### Product features:

- 400+ lumens/ft
- Suitable for most direct view applications
- 90+ CRI
- Dimmable
- 50,000 hour lifespan
- · UL-listed for indoor use
- 3M™ industrial adhesive backing
- · For use with 24V power supplies



The Results

# Project feature:

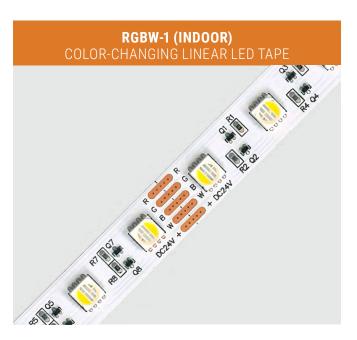
· White lens

### Product features:

- 0.688" x 0.313"
- · Extruded aluminum construction
- Available in 2-meter sections 78.74" (2m)
- Anodized matte finish
- · Custom lengths & finishes available



# **Products Used**



Our RGBW-1 is the brightest RGBW we've ever offered. At almost 8 watts per foot, this product is bright enough for nearly any application.

## Product features:

- 400+ lumens/ft
- 90+ CRI
- Dimmable
- 50,000 hour lifespan
- · UL-listed for indoor use
- 3M™ industrial adhesive backing
- Constant current
- For use with electronic power supplies



# Project feature:

White square lens

### Product features:

- 0.75" x 0.813"
- Extruded aluminum construction
- Available in 2-meter sections
- · Anodized matte finish
- Custom lengths & finishes available

Kelvix® is an architectural-focused linear LED manufacturer with a reputation for great service and fast lead times. Our team is made up of problem solvers and doers, and our staff of highly trained project managers guide customers through each project from start to finish. We always have a client's best interest at heart.