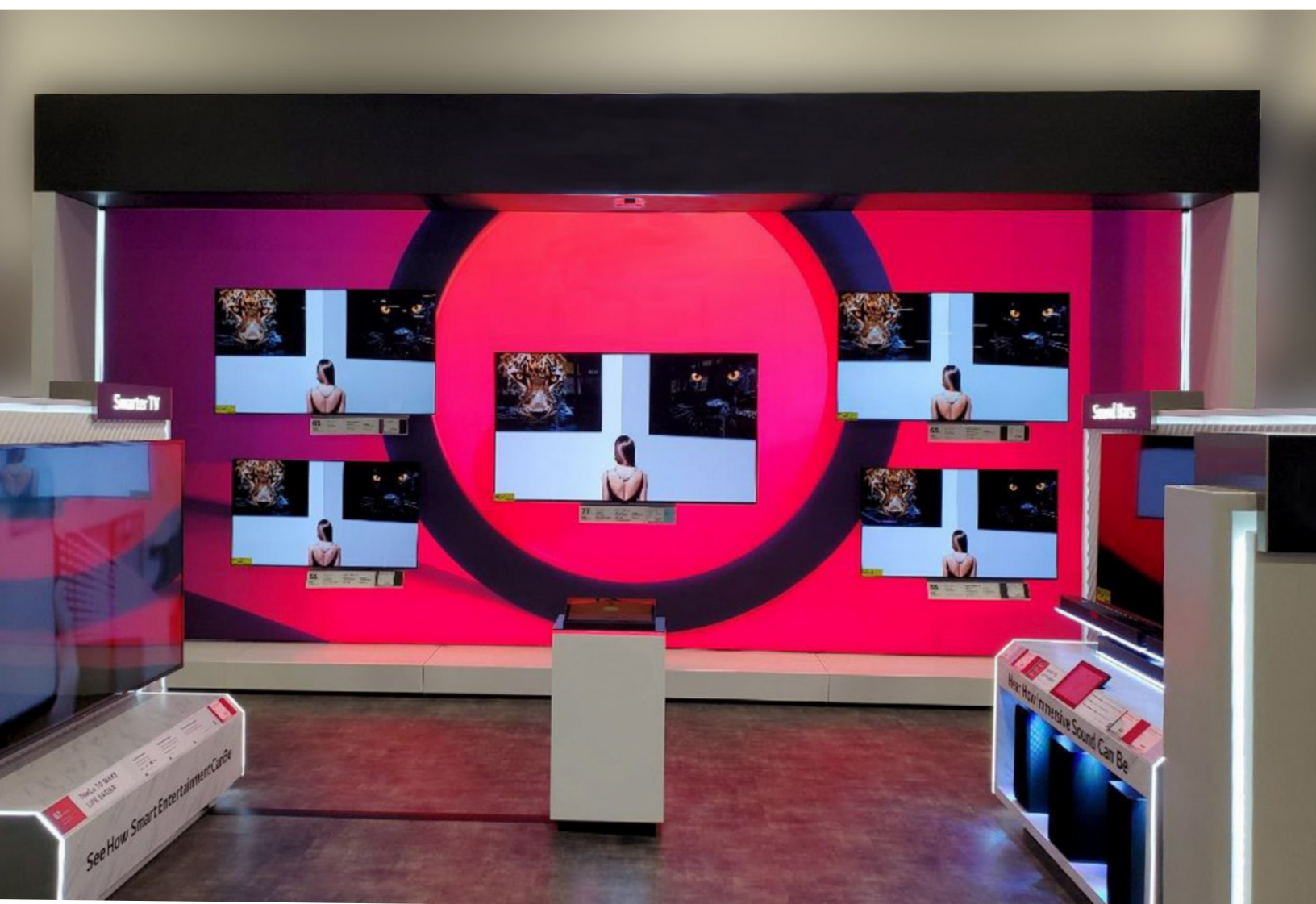


## CASE STUDY

# AGILE LOGISTICS FOR DYNAMIC RETAIL



**LUXDAZZLE™**  
LED DYNAMIC  
LIGHTING



**LUXLINEAR™**  
LED LIGHT TUBE



**LUXFIT™**  
LED LIGHT PANEL



**LUXLINE™**  
LED LIGHT STRIP

**TV HOME THEATER**  
ELECTRONICS DISPLAY  
NATIONAL PROGRAM

# BACKGROUND

## Renovating the Retail Experience for a COVID-19 World

COVID-19 left a lasting mark on the world of retail. Many retail stores went out of business, and those that did remain continued their operations, shifting to curbside pickup to attract customers during the pandemic. With the slower in-store foot traffic, many brands took the extra downtime to renovate the customer experience in hopes their investments would reinvigorated foot traffic in the future.

But the trend of renovation wasn't just limited to businesses; home renovation also became a shopping trend for consumers during the pandemic. Many consumers looked to improve their living spaces with new TV home theater systems. One leading consumer electronics brand seized the opportunity to continue investing in their in-store home theater tv displays to boost their pandemic sales and publicly brand their partnership with a national consumer electronics retailer.

## THE CHALLENGE

### Finding Success Under Challenging Circumstances

The brand sought to capture consumer attention with the illuminated display to better differentiate themselves from their primary competitor. The interactive display included a large dynamic wall light box featuring TVs and speakers mounted on LED illuminated islands. LEDCONN lights were specified for their superior lighting quality and competitive pricing compared to the original. The entire display was designed to reinforce the branding of the prominent consumer electronics brand.

For this wall to wall retrofit project spanning over 230 retail stores, the LEDCONN team was challenged with precisely matching the original specifications and programming the complex dynamic light box under challenging pandemic logistics. Factory shutdowns and raw materials shortages (LED chips, PCB boards) complicated an aggressive four month installation timeline. And on top of that, remote working installation teams added an additional layer of complexity; figuring out a system to foolproof communication failures among remote workers would be key to success.





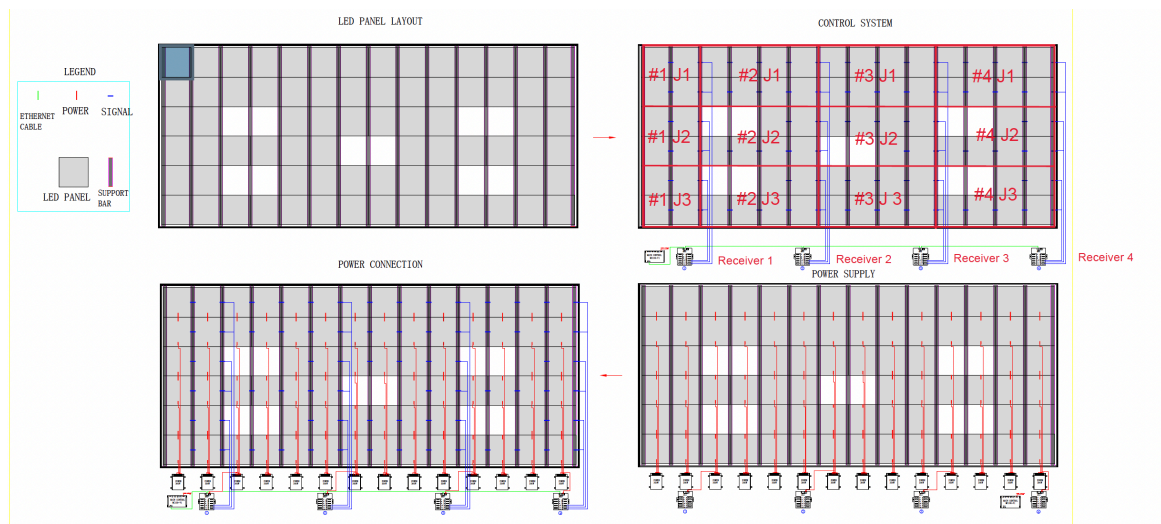
# THE SOLUTION

## Reverse Engineering for Brand Integrity

In order to accurately retrofit the wall to wall light box display, the LEDCONN engineering team set out to reverse engineer the previous display lighting with products similar to the original. LUXFIT light panels, LUXLINEAR light tubes, and LUXLINE light strips at 4500K were customized to provide glamorous accent lighting for the islands, and the LUXDAZZLE dynamic LED board was the showstopper used to power the light box display. The LUXFIT panels, LUXLINE light strips and LUXDAZZLE LED boards were all retooled to integrate smoothly into the existing display. Multiple daisy chained controllers were used with the LUXDAZZLE lighting fixtures, with all wiring matching the specific input and output polarity of the original schematics.

## Making Prototyping a Success for Remote Installation Teams

With many installation teams working remotely, engineering the selected lighting and controls to sync with the brand's proprietary media control programs was particularly challenging. The brand wanted LEDCONN engineers to program LUXDAZZLE using its own proprietary digital media program. Due to the complexity of the media programming, the LUXDAZZLE component underwent six rounds of prototypes. Prototyping took place at several locations worldwide to ensure that the remote installation teams around the world understood the installation and product system well. Each installation team would have at least one working prototype to better facilitate internal team training across remote teammates working in different time zones. While the majority of the focus was on programming the LUXDAZZLE component prototype, prototyping of the custom light panels and tubes also took place to smooth out any issues with evenness and hotspots.



## Bending Over Backwards with Direct Overseas Logistics Support

Upon successful completion of prototyping, the next challenge to overcome was figuring out a way to streamline logistics overseas during COVID-19. Although COVID-19 caused many retail project delays and pricing increases due to raw materials shortages, LEDCONN still managed to streamline communications by providing direct support at the China facility level to the overseas display fabricator. LEDCONN's China engineering support teams made product retooling, prototyping and even logistics scheduling much easier for the fabricator. To meet an aggressive drop shipment deadline, the LEDCONN China support team planned to ship the illuminated displays in multiple 4-6 week cycles. The first shipment was for 86 stores, the next month a batch of lights were provided to 100 stores, and the final shipment reached the remaining 50 stores.

With respect to installation logistics, the LEDCONN team even went the extra mile to provide the smoothest mounting and wiring experience for installers. The brand requested magnet mounts for the LUXDAZZLE and LUXLINEAR display lights with very specific electrical/wiring instructions for their installers. While magnets typically make installation easier, they are notoriously difficult to pass through customs internationally, especially during the pandemic. Even so, the LEDCONN operations team remained persistent in attaining the special customs approval for the magnet mounts. A diagram was provided to help manage power and wire installation concerns. Special molex connectors were used to match the polarity of the controllers, and each controller was pre-wired and pre-labeled for installers to easily identify. Even the LUXDAZZLE boards were provided pre-packaged to make finding parts during installation even easier.



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# THE FINAL RESULT

## Retrofit Done Right

In spite of the complexity of the product programming and logistics during COVID-19, the retrofit project was a success and achieved what the brand intended. Foot traffic at the retailer increased, and through 2022, the retailer continues to renew the program as TVs continually move through product shelves.



**Do you need a lighting solution for your project? Our team is ready to help!**  
**Reach out to us for a complimentary lighting consultation today!**