

Digital Electricity works its magic at Las Vegas resort and casino

Belden cabling and connectivity support the use of Digital Electricity™ as the backbone power distribution infrastructure to engineer a highly intelligent building.

Case Study



Customer

When Derek and Greg Stevens (known as the “D Brothers” from Detroit) envisioned their new Las Vegas venue, they were looking to create an experience that would set them apart from any other casino or resort.

Everything about the new 35-floor, 1.2 million-square-foot property is distinct—from its adults-only atmosphere to its old-school Vegas ambiance, complete with the iconic Vegas Vickie neon sign.

Circa Resort & Casino Las Vegas also features a fifth-floor aqua theater called Stadium Swim: six pools,

swim-up bars, cabanas, daybeds and chaise lounges lavishly spread across three cascading levels and providing more than 4,000 people a front-row view of a super-sized high-definition screen that broadcasts all kinds of entertainment.

Covering an impressive city block, Circa is not only the tallest hotel north of the Strip, it is the first hotel-casino in downtown Las Vegas to be built from the ground up since 1980.

Challenge

The owners of the Circa Resort & Casino Las Vegas applied their ingenuity to every aspect of the property’s construction.

For example, at Greg Stephens’ insistence, they opted for Digital Electricity (DE) as the backbone power infrastructure as a way to decrease energy use and construct a greener, more intelligent facility. His vision involved powering everything from lights and switches to in-room climate control and wireless access points with DE.

“We were thrilled. We love working with Belden. They have quality products and a cable designed to work fantastically with Digital Electricity.”

—Ken Hydzik, EVP of Global Sales at VoltServer



This green approach meant finding a cabling and connection partner who could think outside the box. Unobstructed views were crucial to many aspects of the project, including StadiumSwim, which meant that the entire infrastructure, including utility poles for Wi-Fi connectivity, had to be completely hidden.

With the structure being built along a narrow street among existing high-rises, careful planning and maneuvering for material delivery would be needed throughout the project.

COVID-19 also created its own restrictions, limiting the number of people allowed on the jobsite and preventing regular check-ins on progress. The project had to be managed remotely while still staying on schedule.

Discovery

FEA Consulting Engineers, a hotel engineering firm based in Nevada, was partnering with VoltServer—the creator of Digital Electricity™—to make the owners’ dream a reality. The engineering firm recommended that Belden provide cabling and connectivity solutions.

“We were thrilled,” says Ken Hydzik, EVP of Global Sales at VoltServer. “We love working with Belden. They have quality products and a cable designed to work fantastically with Digital Electricity. Belden is a great solution when people ask, ‘What should we use for conductors?’”

Solution

Belden Digital Electricity™ (DE) Cables were deployed to support the backbone power distribution infrastructure; they’re optimized to safely extend DE across the longest distance possible. In many cases—including at Circa Resort & Casino Las Vegas—networks utilizing DE can be installed by low-voltage technicians instead of electricians (similar to a PoE cable), saving time and money.

In addition to DE Cables, Belden also provided Category 6, AV, CCTV/security and access control cable, as well as copper connectivity, racks and cabinets.



“We saved so much time because we were able to pull the wire in and not have to punch it down on the blocks.”

–Keith Nichols, Founder of DKNQ Inc.



Despite the scope of the project, it wrapped up two months ahead of schedule, which, according to Keith Nichols, founder of DKNQ Inc. and the owners’ representative, was due in part to Belden’s REVConnect system.

“We saved so much time because we were able to pull the wire in and not have to punch it down on the blocks,” he explains.

Once the connection is first terminated, a QA test is performed to ensure it’s working properly before finishing contractors begin their work. After their work is done, the jack or plug body and faceplate can be installed. REVConnect’s unique core and cap lets installers finish 95% of the termination without needing to know whether a jack, plug or coupler will be used.

“We left all the connections terminated in the ceiling and drywalled it,” says Nichols. “Because it was terminated and tested before we put the drywall up, it saved tons of time. We didn’t have to put anyone on a lift to test and terminate everything in the air. The labor savings were very large.”

According to Nichols, REVConnect turned out to be a lifesaver during COVID because the various contractors working onsite never had to cross paths or work next to each other.

The connectivity system also allowed apprentices and new installers to complete mission-critical work with minimal training.

“REVConnect doesn’t allow for error,” Nichols explains. “With a traditional termination, a new employee doesn’t know which way to terminate, or they can mess up the wires. If you don’t have someone who’s good at crimping, terminating and punching down, you have a mess on your hands. REVConnect allowed us to quickly become operational. Conventional termination methods don’t do that.”

Communication Electronic Systems (CES), a Belden Certified Belden Installer located in Las Vegas, did all the installation work. Because the company is certified, its team members are trained according to the latest, most relevant industry technology and standards. CES is also able to offer customers 25-Year Product Warranties and Lifetime Application Assurance for Belden solutions.

“Having an owner, consultant and manufacturer that were ready to change the power distribution paradigm in this market vertical has been a gamechanger.”

-Ken Hydzik, EVP of Global Sales at VoltServer



Results

In October 2020, in the middle of a pandemic, the grand opening of the Circa Resort & Casino was celebrated, nearly two months ahead of schedule! Nichols said this was only possible with a partner like Belden.

Hydzik agrees: “Working with FEA and Belden early on in the design process was critical to the success of building in the middle of a pandemic. Having an owner, consultant and manufacturer that were ready to change the power distribution paradigm in this market

vertical has been a gamechanger. We’re already seeing substantial interest on the Strip considering this same Digital Electricity model.”

In addition to lower utility bills, Nichols estimates construction cost savings of between \$2 million and \$3 million thanks to the combination of using VoltServer’s DE and Belden’s DE Cables instead of dedicated AC power.

Circa Resort & Casino Las Vegas makes a lasting impression on the Strip for many reasons. Not only does it generate new traffic and attractions in the area, it also is the most intelligent building downtown, thanks to DE and Belden connectivity cables.





About Belden

Belden Inc. delivers complete connection solutions that unlock untold possibilities for our customers, their customers and the world. We advance ideas and technologies that enable a safer, smarter and more prosperous future. Throughout our 120+ year history we have evolved as a company, but our purpose remains – making connections. By connecting people, information and ideas, we make it possible. We are headquartered in St. Louis and have manufacturing capabilities in North America, Europe, Asia and Africa.

For more information, visit us at:
belden.com

follow us on



© 2025 | Belden and its affiliated companies claim and reserves all rights to its graphic images and text, trade names and trademarks, logos, service names, and similar proprietary marks, and any other intellectual property rights associated with this publication. BELDEN® and other distinctive identifiers of Belden and its affiliated companies as used herein are or may be pending or registered or unregistered trademarks of Belden, or its affiliates, in the United States and/or other jurisdictions throughout the world. Belden's trade names, trademarks, logos, service names, and similar proprietary marks shall not be reprinted or displayed without Belden's or its affiliated companies' permission and/or in any form inconsistent with Belden's business interests. Belden reserves the right to demand the discontinuation of any improper use at any time.