A complete end-to-end connectivity solution from Belden helps HB Communications create an Audiovisual Ecosystem that provides a high-caliber communication and collaboration experience, and serves as a showpiece to help customers imagine what’s possible when integrating AV and IT.
For more than 70 years, HB Communications has used technology to help organizations of all sizes improve communication. As one of the largest companies in its industry, HB Communications’ team of 350+ designs, builds and supports AV communication environments that transform how organizations connect and communicate.

From video collaboration and digital signage to managed services and live event support, HB Communications’ strength lies in custom AV/IT integration. It has helped well-known organizations like Mitsubishi, the Boston Celtics, New York Law School and Spotify build engaging AV communication environments.
Challenge

During the recent renovation of its corporate headquarters in North Haven, CT, HB Communications wanted to reimagine how AV technology is implemented and integrated throughout not only its North Haven location, but also across the entire company.

“Using technology to connect used to be somewhat difficult at our headquarters,” says Dan Barron, director of brand strategy. “We needed things to be truly simple.”

Employees saw the opportunity to change the company’s technology approach, making it easier and more straightforward to use. Creating a space like this would take advantage of decades of knowledge to showcase unique applications of technology and capabilities to customers, and improve internal and external communication and collaboration.

Working together, the marketing, finance, executive and IT teams created their concept of an Audiovisual Ecosystem, which serves as a showpiece and provides a state-of-the-art environment for meetings, impromptu collaboration and presentations to live or remote audiences.

The company had many goals for its Audiovisual Ecosystem:

• Establish one easy-to-use collaboration platform for all mobile, desktop and onsite users
• Immediately and seamlessly join meetings with any device in any conference room
• Make room scheduling easy through personal devices and touch panels outside conference areas
• Allow external/remote users to easily join meetings and use conference spaces
• Enhance the brand experience for employees and customers
• Create an easy-to-use collaboration platform for the entire organization (including mobile desktop and collaboration spaces)
• Improve communication with coworkers and customers
• Modernize the workplace
At the center of the Audiovisual Ecosystem is the Hub, which provides space for collaboration, events and social gatherings. Several adjacent work areas offer customized spaces for small meetings, brainstorming and ad hoc meetings. Real-time data about HB Communications’ managed services and clients is showcased in the new network operations center. An onsite content studio allows the company to produce its own videos, announcements and broadcasts.

“For being an AV company, we were so focused on what our customers needed that we didn’t focus enough on how we could apply technology solutions to our own organization,” says Daniel Barron, director of brand strategy at HB Communications. “So we analyzed our organization to identify opportunities to innovate and find out what employees needed and wanted, which drove our technology decisions. We used our technology specializations to enhance our own communication, collaboration and brand experience – just like we’ve helped so many of our customers do.”

To support the technology that makes up this Audiovisual Ecosystem, HB Communications needed a cabling infrastructure that could provide seamless, constant connection and integration for all devices and content, including immersive video walls and digital signage, 4K video content and digital art, overhead audio and surround sound, and BYOD devices. Staff also wanted to integrate AV and IT to support a live, 24/7 connection between headquarters and remote locations.

“Our goal was to truly improve our business as much as we could through the use of technology,” says Barron.
Working together on projects in the past, HB Communications was familiar with Belden and its reliable, high-quality, end-to-end connectivity solutions.

With the type and caliber of AV solutions being deployed in the Audiovisual Ecosystem, the company was confident that Belden could provide futureproof cable and connectivity solutions to bring these solutions to life, ensure constant uptime and provide smooth, reliable connections.

“Our goal was to truly improve our business as much as we could through the use of technology.”
Dan Barron, Director of Brand Strategy at HB Communications
“We pretty much use just Belden cabling here,” says Brian Metcalf, director of engineering. “From the audio and network cables to the HDBaseT and HD-SDI cables, it’s all Belden.”

For AV transportation and video switching, more than 5,000 linear feet of Belden’s 4K Ultra HD Media Cable supports a Crestron DigitalMedia system – a 32x32 DigitalMedia matrix switcher – which connects the Hub and a few other spaces to one frame and serves as the AV backbone, transmitting and distributing audio and video. “We’re distributing 4K content across the board,” says Metcalf.

A Biamp Audinate Dante audio networking system, which transports low-latency, uncompressed audio over IP networks, is supported by Belden cabling as well. This simple sound system allows users to enter a room, plug in a device and be ready to go. For sister company HB Live – the company’s rental staging arm – the Audiovisual Ecosystem’s sound system is set up to roll over a mixing console and plug into the Biamp audio network with a single cable to gain access to everything available in the built-in audio system.

More than 38,000 linear feet of Belden 10GX Category 6A cable support the needs of the Audiovisual Ecosystem, which required high-density connections and superb mechanical and electrical performance.

The REVConnect Connectivity System was also used to simplify termination. The connectors use a unique termination process with a universal core comprised of a cable manager and cap. Supporting devices requiring up to 100W of power, REVConnect creates highly reliable, gas-tight terminations for all Category 5e, 6 and 6A UTP and STP cables.

To ensure that installers were comfortable working with this new termination method, Belden provided onsite, hands-on training. “Once our technicians built competency with REVConnect, terminations went quickly and smoothly,” says Metcalf. “We’ve had a winning record with them; very few re-terminations were needed. REVConnect saves time and is quicker to terminate than a standard RJ45. A year and a half later, we haven’t had any issues with terminations.”

“REVConnect also reduced jobsite headaches. Ideally, terminations are tested with a cable tester once they’re complete. When installers are under a tight schedule, however, this step is sometimes deferred. The cable is pulled, terminated and connected to the endpoint equipment. If the device doesn’t work, the installer must deductively wade through many possible causes in order to confirm the root cause. But, when REVConnect is used, bad cable termination is easy to eliminate as the cause,” says Metcalf.
“Our employees are confident with REVConnect. They’re confident in how easy it is to use, and they want to use it.”
- Brian Metcalf, Director of Engineering at HB Communications

By reimagining its headquarters and creating an Audiovisual Ecosystem for seamless internal and external communication, HB Communications proves that almost any type of collaboration is possible through the integration of AV and IT technology.

“Our employees are confident with REVConnect,” says Metcalf. “They’re confident in how easy it is to use, and they want to use it. There has been a lot of growth in IP-based applications, particularly in teleconferencing and AV over IP. REVConnect improves HB’s productivity, which demonstrates to our customers that they can enjoy this same productivity increase with a similar technology investment.”