

AV Enhances Customer Experience for Outdoor Living Retailer



here AV in retail was once an afterthought, there is no question now that AV is a fundamental part of the customer experience. The technologies used inside stores today are positioned to engage rather than simply promote, and drive greater interactivity between the business and the shopper.

More than ever, the AV systems integrator makes a difference in how AV technology is deployed to serve the broader customer experience. The Werd Company is one such integration firm that specializes in AV integration for retail spaces, and adds greater value through its experience in live event production.

A recent project with the YETI retail store in Chicago highlights that overall value proposition, with The Werd Company providing comprehensive systems AV design and integration services for the 4900-square-foot store. In addition to in-store AV and digital signage, The Werd Company also designed a live sound and lighting system to support live events.

"We started working with YETI about five years ago in Austin, providing live production services for concerts, broadcasts, and other events," said Drew Dunavan, Chief of Operations at The Werd Company. "That relationship evolved as they started to open retail stores around the nation, but brought with it a unique approach to commercial AV design with roots in the creative events world. The Chicago store is an excellent example of an AV system that can serve their retail purposes, and provide live event support for concerts, product launches or special in-store film screenings."

The Wicker Park neighborhood store, which opened on September 29, 2019, certainly embraces AV as a way to promote YETI's broad product inventory (outdoor



living products, drinkware, coolers). The completed installation is something of a hybrid AV system that brings together legacy and IP-networked technologies, but leans heavily on the latter.

The IP ecosystem incorporates virtually all audio and control elements on campus, including Atlona's Velocity AV control platform, Audinate's Dante for multichannel audio networking, and a Symetrix Prism DSP. The latter integrates with Dante to implement, control and maintain a system of networked accessories within the store and the performance area, including microphones, loudspeakers, power amplifiers and mixing consoles.

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The video side brings together systems with a mix of IP, HDBaseT and HDMI technologies, along with a 3x3 video wall that YETI employees can locally control. Additionally, Werd engineers and support team can remotely access all elements of the house and event



AV system, as well as three digital signage displays to manage playlists and update content.

"We integrated the video matrix wall in this space along with a stage backdrop, and added a full lighting rig and PA system," said Dunavan. "Everything is plug-and-play ready so that they are immediately ready to go for bands, screenings and promotional events."

Getting In Early Streamlines Design

The ground-up project meant that The Werd Company was entrenched in the earliest conceptual design phases, working closely with Lake Flato, the architectural firm; and Manito Construction, the prime contractor. Early work included plotting and submitting a low-voltage plan that encompassed all low-voltage wiring needs and locations, wallplates, and placement of loudspeakers, displays and supporting AV components. This technical detailing was led by partner and CEO of Werd, Ali Ramzanali.

"Being the low-voltage management partner meant that we were heavily involved in the IT network design, and facilitating all components of the underlying Layer 1 infrastructure," said Ramzanali. "We worked closely with the other trades across security, shopper tracking, structured cable planning with CPS, and YETI's own IT department for Wi-Fi and point of sales systems, to formulate the logistics of implementation."

As is increasingly standard, AV and IT systems were co-located in the same space. Dunavan and his team consolidated core AV systems, including the Prism DSP and remote management PC, into a standalone MSTR RACK ER42 – a 42-inch enclosed rack with active cooling

and horizontal lacing bars for wire management. CAT6 patch panels distribute discrete, segregated network connectivity to Ubiquiti's UniFi system driven by their USG-Pro4 gateway, and US-24-500W 24-port switches that securely connect the AV network to YETI's IT infrastructure.

The remaining rack infrastructure includes a Luxul AV Series AMS-1816 managed switch for managing video transmission, as well as three Dante-enabled Crown Audio DCi amplifiers for multi-zone audio.

"The Luxul switch was configured specifically for the video matrix wall," said Ramzanali. "The 18-port switch configuration provides us with extreme flexibility to send

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Ali Ramzanali, CEO of The Werd Company

modular content formats to the LG 55-inch displays. The Crowns amplify the audio signals from the video wall sources over Dante to 70-volt JBL Control series speakers for daily delivery of background and foreground music."

Atlona's Velocity VGW-HW IP-based control processor is the final rack component, and arguably the most important as it touches nearly every component in the system – a mix of HDBaseT switching and IP routing equipment that manages 4K or HD content for the video wall.



The video wall architecture includes a JunoX 451 HDBaseT switcher, which is used to switch between four video sources. Once selected, the signal moves into an AV over IP system powered through the Luxul switch. That switch feeds nine AV over IP receivers, each of which is dedicated to one display in the 3x3 video wall.

The video wall can translate a single 12-foot wide, seven-foot high image over all nine displays, or separate images for different displays. An Atlona single-gang, dual-HDMI wallplate (AT-HDVS-210H-TX-WP) provides auxiliary inputs for the same wall, allowing staff to present content from standalone devices.

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The YETI Presents content was the "primary driver" for creating the video wall, according to Dunavan. The playlists are composed entirely of YETI-produced content created to promote the brand, including short films, documentary mini-series, and short promotional pieces that include product overviews. The Werd Company works closely with the marketing team and other departments to manage content scheduling and distribution once production is completed.

"Most of the YETI Presents content that lives on this wall exists in rotating playlists that are scheduled in loops," said Dunavan. "They give us the content and we ensure that it is properly formatted before building the playlists and schedules. We maintain the digital infrastructure throughout, although they can manually override our schedules if they are staging an event, or want to switch over to DirecTV for the Chicago Bears game. This is all part of The Werd Company's continued support services, which have proven especially popular in retail environments."

The Werd Company also maintains the digital signage content and infrastructure, which includes three 43-inch LG screens mounted in portrait mode. These screens represent the ambassador wall; a set of carefully calibrated, picturesque displays featuring YETI's brand ambassadors in their respective elements. A Raspberry 3 Model B+ single board computer supports digital signage content playback.

Unlike the video matrix wall, local staff cannot override content on the ambassador screens. "More than the video wall, these screens represent the spirit and nature of the YETI brand," said Dunavan. "The ambassadors will move every few minutes and occasionally look at the camera before resuming as a still image. The dynamics capture shopper attention, so it's important to maintain those visuals. Therefore, everything is scheduled, monitored, and executed remotely for YETI through our subscription model."



Off-site Preparation

Most of the system programming was managed through Velocity and Symetrix.

"The programming was mostly done in advance from our Austin, Texas headquarters," said Ramzanali. "We assembled the skeleton of the system, mapped the signal flow into the software, and programmed the devices as if they were already installed."

That preparational programming, along with the reduced architecture that IP offers, helped to keep labor costs manageable for all parties.

"Man hours and cable management make a big difference to the bottom line," said Dunavan. "We can be much more efficient with IP, as we can easily install systems in spaces that are challenging to access. IP removes the physical constraints and the point-to-point limitations that we especially see with audio and control."

Ramzanali notes that Velocity has been especially valuable from a capacity perspective. "We're already moving a lot of data over Velocity, and we are only at approximately 60 percent capacity," said Ramzanali. "There is plenty of room to scale, as this IP gateway can manage up to 250 devices. The benefits also extend to the end user through an intuitive touch-based matrix that is easy to learn and use."

An Atlona Velocity VTP-800 8-inch touchscreen supports the end-user portion of the control architecture. The

touchscreen is installed in the manager's office and remotely powered over Ethernet, like many of the components living on the IP network. The VTP-800 is programmed to control three individual zones: the retail zone, the YETI Presents zone, and the stage.

"The manager can easily switch between different input options using the Velocity panel, and even create a primary zone," said Dunavan. "Each zone has a dedicated set of selectable inputs, and there is volume control for individual zones. It's also very easy to serve ambient music for the entire store, or use the microphone input to make announcements."

Since all audio moves over Dante, there is essentially no limit to where staff can send audio content. That includes the video matrix wall, where they often localize audio for film screens.

"We have multiple audio inputs for that wall that automatically plays over the local JBL loudspeakers, and simultaneously be pushed across the retail floor," said Ramzanali. "The Dante network gives us all the flexibility we need to route audio signals and process them through Symetrix. We can easily assign speakers to specific zones, and establish our gain structure, EQ and compression within the DSP, and set limited control parameters using Velocity for safety, and ease-of-use. Just as Velocity does for control, Dante streamlines and simplifies our audio."

The integration team also added a Dante-cored Attero Tech unD3IO for audio support. This is a multi-I/O audio

interface mainly used for "single mic setups" or DJ inputs on-stage. The Attero Tech wallplate further simplified integration by allowing installers to add traditional RCA and XLR input connections while only requiring a single CAT6 cable run.

"The Attero Tech wallplate can have up to four different audio I/O connections," said Ramzanali. "Before Dante, that would have meant running three or four individual lines to that wall box, terminating them, and then working through other challenges that come from the mixing of balanced and unbalanced connections. Dante removes all that. We just run a single line, and tell Symetrix what their gain structures are, and set scenes to modify the signal route."

The Symetrix DSP integrates the different audio sources for both the inputs and outs, according to Ali. "We used Attero Tech to provide a variety of solutions for any audio sources that required a physical analog input. When the space is modified for events, those same audio inputs can be re-routed to the Dante card of a Behringer X32 PRODUCER digital audio console, and act as a stage snake," said Ramzanali. "It's incredible to have Velocity's control system talk to Symetrix to instantaneously reconfigure a workflow that - only a few years ago - would have required lots of time, unplugging, re-plugging, and cable wrapping."

Ali also noted that the Behringer desk audio feed can also be sent to the entire store by running it through the same Ethernet cable via the Dante card with nearly zero latency.

Like Velocity, The Werd Company selected the Symetrix Prism in large part for its scalability.

"An important part of any successful AV installation is having the foresight and ability to expand for future usage or technology upgrades," said Dunavan. "The Prism system is expandable, and integrates very well with third-party components. It's just a very simple and reliable audio interface that touches every part of the audio system, including the stage."

Beyond the X32 mixer, the event system's audio technology touts a dbTechnologies PA system with VIO-X12 active two-way loudspeakers, LVX-XM-12 two-way active stage monitors, and an AMS-SUB-15H active subwoofer. A dbTechnologies RDNet Control 2 system enables Werd's engineers to configure the suspended powered speakers without a cherry picker, while a small arsenal of Shure SM57 and Sennheiser e600, e609 and e935 microphones capture vocals and instruments from performances. Elite Core provides the stagebox and microphone cables to support the entire system, along with cables and connectors for the Chauvet DJ lighting system.

"The Chauvet lighting console controls a line of 18x18w LED PAR fixtures over DMX, and they are generally run in tandem with audio mixed at the Behringer," said Dunavan. "The entire stage system has all of the breakouts required for a live sound professional to mix the band or produce a live broadcast."

For the team at The Werd Company, the YETI Chicago retail store is a model representation of where retail AV integration is headed while also retaining unique flourishes.

"Chicago is a city that embraces sports and music nearly equally, so it was critical to have that big video wall to show home team games, and design a stage that touring artists and their fans can appreciate," said Dunavan. "Both of these strategies have helped the Chicago store truly integrate with their clientele and provide a space where they can see and touch their products while enjoying the vibe. It is a place where local shoppers can hang out and absorb the YETI retail experience in an engaging manner."







SELECT FEATURED PRODUCTS

MODEL	DESCRIPTION	
AT-VGW-HW	The Atlona VGW-HWs are Velocity™ System hardware server gateways that provide multiple rooms of IP-based AV control and room scheduling. Each gateway also includes the Atlona Management System (AMS) for configuring and managing Atlona devices over the network, BYOD control at no extra cost, and Velocity Cloud Lite remote management.	Washington of the state of the
<u>VTP-800</u>	The Atlona VTP-800 is a Velocity System 8" touch panel for AV control and room scheduling. It features contemporary, refined styling for modern presentation environments with 1280×800 native resolution, and a capacitive glass surface that supports multi-touch and gesture interactions.	Non treat
AT-JUNO-451-HDBT	The Atlona JunoX™ 451 HDBT is a 4×1 switcher for high dynamic range (HDR) formats. Part of the comprehensive family of Atlona 4K HDR integration products, it features three HDMI inputs, plus an HDBaseT input for receiving video, embedded audio, and Ethernet over distances up to 330 feet (100 meters). It is HDCP 2.2 compliant and supports 4K/UHD video @ 60 Hz with 4:4:4 chroma sampling, as well as HDMI data rates up to 18 Gbps.	ATLONA DE LE COMPANION DE LE C
AT-HDVS-210H-TX-WP	The Atlona AT-HDVS-210H-TX-WP is a 2×1 switcher and HDBaseT transmitter with two HDMI inputs. It features a US one-gang, Decora-style wallplate form factor. Video signals up to 4K/UHD @ 60 Hz with 4:2:0 chroma subsampling, plus embedded audio and control can be transmitted up to 330 feet (100 meters).	ACTION JAMES AND THE STATE OF T