

BELDEN

SENDING ALL THE RIGHT SIGNALS

Golf Channel

To create the illusion of a golf course in its Studio AP, Golf Channel needed an alternative to fiber and traditional copper cable that could transport ultra-high-definition video via HDBaseT™ over long distances.

Our End-to-End Expertise
Your End-to-End Solution





Customer



The Golf Channel first hit the airwaves in early 1995 as the first U.S. single-sport cable network. Owned by the NBC Sports Group and headquartered in Orlando, FL, it has 1,000+ employees and more than 80 million viewers in 84 countries across the globe.

There are four active Golf Channel studios, all of which broadcast programming to viewers. Golf Channel is the home to the PGA TOUR, LPGA Tour, European Tour, WEB.com Tour, PGA Tour Champions, NCAA National Championships and several other worldwide golf tours and events, such as World Long Drive Championship and the Drive, Chip and Putt competition.



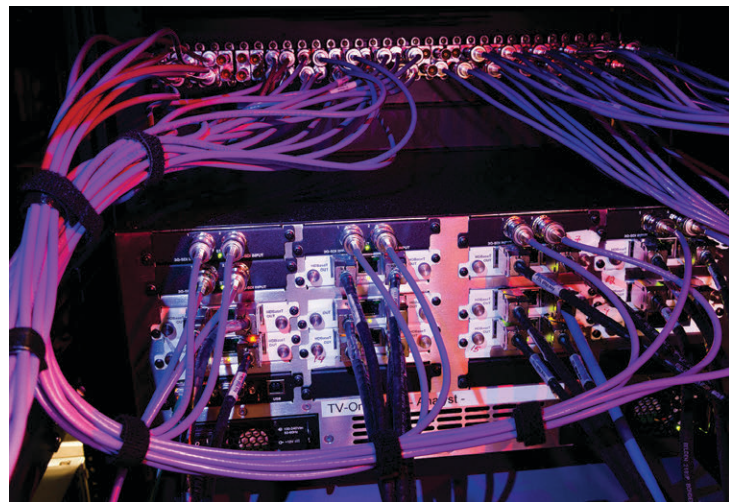


Challenge

In Golf Channel's 1,980-square-foot Studio AP, designed in 2013, there are two sets with monitor backdrops: the Host Desk and Interview. To improve the viewer experience, the Studio AP Host set has ten 90-inch LED monitors installed on a vertical plane, and 10 52-inch LED monitors installed on a horizontal plane above the vertical monitors. The Interview set has nine 90-inch LED monitors on a vertical plane.

Ultra-high-definition (UHD) 4K video footage of a course displays across these screens, creating the illusion of a real-life golf course behind the Morning Drive talk show's main anchor desk and interview area. The screens mimic clubhouse windows that look out onto a course as the sun rises, the sprinklers engage and golf course maintenance begins.

To get the highest-quality picture possible on air, Golf Channel required a cable capable of transporting UHD video signal via HDBaseT over 300 feet from its 4K display processor to multiple displays. Although each cable technically carries a 3G 1080P signal that constitutes the four quadrants of UHD, a high-performance cable designed specifically for HDBaseT with enough headroom to ensure absolutely no signal loss was needed.





Discovery

Golf Channel had a relationship with Belden for many years, using its 1694A, 1855A and 1505A coax cables, as well as Category 5e 1700A cable. Based upon a successful existing relationship, they chose to reach out to Belden for this project to see which solutions might work for their transmission needs.

Belden was in the process of testing its new 4K UHD Media Cable. Once testing was complete, it confirmed that the cable could meet Golf Channel's needs and budget.

Golf Channel and Belden have had a relationship for many years. In the past, the cable and satellite television network had used Belden's 1694A, 1855A and 1505A coax cables, as well as Category 5e 1700A cable.





Solution

Twenty-nine runs of 300-foot-plus 4K UHD Media Cable connect Golf Channel's display processor to the studio displays. By using HDBaseT over this cable, 4K signals can be transported with no signal loss whatsoever.

Much smaller in diameter than other cables used to deliver 4K content, the 4K UHD Media Cable was also easier to pull during installation, notes Tim Pluto, project manager at systems integration firm KCI Communications Infrastructure, which helped Golf Channel meet its tight timeline.

To further reduce installation time and costs, 4K UHD Media Cable, 2183P, was terminated using the Belden REVConnect® Connectivity System. REVConnect features a simplified termination process that is completed quickly, allowing this cable (and category cables) to be terminated onto a single core compatible with eight RJ45 modules, including jacks and plugs. This allows Golf Channel to put any type of end on the cable it wants, and

later swap them out if needed. If the cable needs to be extended, for example, the ends can be changed and a mating connector can be added.

Improved cable strain relief was also noted by project managers as a result of using REVConnect. With this solution, there's less chance of pins being pulled out of the connector, which provides a more reliable connection.

This Golf Channel project was the first installation using 4K UHD Media Cable and REVConnect, and the installation worked correctly the very first time. The combination kept project costs under control for Golf Channel, giving it the in-studio technology it needed without breaking the bank. A full fiber transport would've worked in this application, but Golf Channel knew that the cost for the fiber, installation and ancillary hardware would've been much more expensive. Using this Belden cable kept Golf Channel well within its budget constraints.



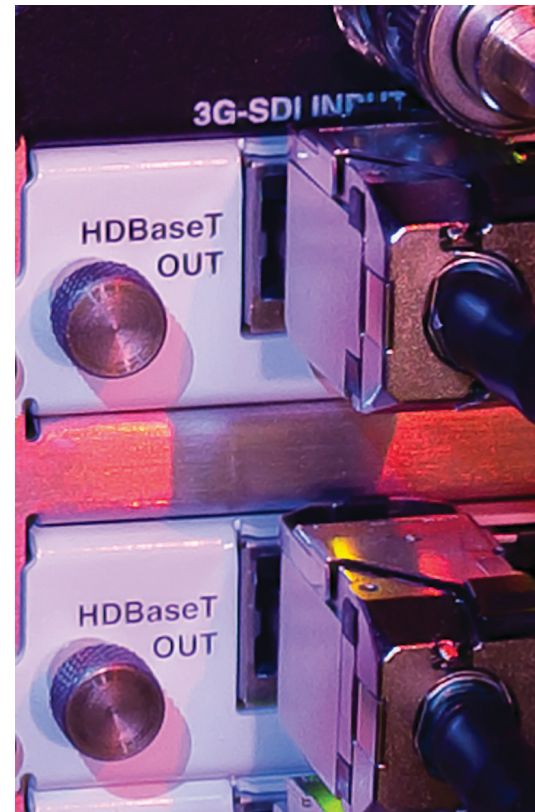


Results

Golf Channel can easily drop whatever footage it wants into its playback server and not have to do much adjustment in the display processor.

The new in-studio technology supported by high-performance 4K UHD cabling increases the quality of the picture seen by viewers during Golf Channel broadcasts. And when Studio AP is ready to broadcast its studio programming in 4K to viewers, it already has the infrastructure in place to support it.

The new system will also allow Studio AP to use different graphics for marketing purposes, giving them options beyond displaying video of a real-life golf course. Golf Channel can easily drop whatever footage it wants into the playback server and not have to do much adjustment in the display processor because it's already all set. That makes it a lot easier to change out items and be more creative about what is displayed.



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