



Led by the Royal Canadian Mounted Police (RCMP), the Vancouver 2010 Integrated Security Unit was responsible for securing the 2010 Winter Olympic and Paralympic Games.

The massive AV support systems needed for the RCMP Command Centres played a critical role in the success of the security effort, and were delivered by Crestron and Canada's leading AV supplier AVW-TELAV.

The two major venues for the 2010 Winter Olympics were in Vancouver and Whistler, situated about 100 miles apart. The security infrastructure was similarly separated, to protect the tens of thousands of athletes and visitors from all over the world. A Military Command and Control Center was set up at Whistler; the Local Command Center, the Master Command Center and their respective backup facilities were located in Vancouver.

Audio and video came from diverse AV sources and locations, with 30 centralized feeds routed through the Master Command Center (the main AV control facility), which was equipped with 37 HD displays. Sources included more than 100 HD security cameras, four to five simultaneous HD broadcast feeds of the individual events, HD mapping

graphics and an assortment of high resolution computer applications, such as computer-driven digital signage. All feeds were delivered to and from the Master Command Center using the latest Crestron DigitalMedia™ (DM) products and HD switchers. A total of 12 Crestron control systems served as the “brains” behind the complete, integrated AV solution.

DM provided the communications backbone for each facility, due in part to its highly reliable, single platform infrastructure. DM transmits multiple signals over fiber, including analog audio and video, high-res computer, HDMI, DVI, DisplayPort, Ethernet and USB keyboard/mouse control over a single wire. DM Fiber distributes full HD content up to 1000 feet, and provides exceptional resistance to data interception. In addition, DM extracts audio from HDMI, routing stereo to speakers in multiple rooms without the need for an additional processor.

Fourteen Crestron DVPHD multi-window video processors enabled security personnel to monitor selected sources in up to eight simultaneous, full-motion video windows on each display. Stringent security required that all requests for video feeds went to the Master Command Center and/or the Military Command and Control Center. Crestron Roomview®

Server Edition enabled full control over signal routing from 18 cascaded DM-MD16X16 switchers. Forty HD-MD8X2 QuickSwitch HD™ HDMI switchers, 50 DM-TX-100-F and 30 DM-TX300N-F fiber transmitters and 80 DM-RMC-100-F fiber receivers completed the signal paths feeding all the uncompressed signals to the DVPHDs or directly to a display.

The high-tech security centres that protected the 2010 Vancouver Winter Olympics relied on AV support systems delivered by Crestron and Canada's leading AV supplier AVW-TELAV.

Also, signals could be routed to and from on-site conference rooms and other designated buildings around the complex for press conferences, media interviews and other meetings. In addition to the primary routing system, a stand-alone DM-MD8X8 switcher — with all fiber inputs and outputs — routed the highest security content.

Crestron Media Presentation Button Panel (MP-B10 and MP-B20) units and an MPC-M25 Media Presentation Controller™ supplied local control in each conference room. DM-TX-300N-F fiber transmitters provided audio and video

input connectivity for a laptop, local computer or other portable AV sources. Any of these local sources could be routed through the main DM switcher, enabling the sharing of content across the network. The Crestron audio amplifiers and mixers that fed the conference rooms were located in the main control room, eliminating the need for local racks of equipment.

"This type of quality of product and the commitment to professionalism truly ensured that the Olympic Command Centres had all the right tools," said Paul Weisbeck, Audio Visual Planner & Coordinator, Vancouver2010 ISU/RCMP. "The mere fact that Crestron and AVW-TELAV delivered a system that had all the capacity to handle High Definition was amazing, and the success of the project was worthy of a gold medal in itself."

"The ISU/RCMP knew that all the content in the stores, hotels, sports venues and security stations needed to be digital. The concern for them was how to manage and distribute all the HD content safely and reliably," observed Vin Bruno, Crestron Director of Marketing. "Once they evaluated DigitalMedia, the decision was made quickly. No other system was able to handle all the different formats over fiber, manage all the embedded data and transmit multiple HD signals simultaneously."