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New Store, New Look, New Security

To help secure Canadian Tire's new concept store, D&A Video Systems installed a state-of-the-art video surveillance system that is designed to perform three very important functions: deter, monitor and identify.

By Paul Grossinger

Building relationships is the key to any successful business, so when it came time for the newest Canadian Tire facility in mid-town Toronto to install a video surveillance system, it naturally selected a security company it was familiar with.

"It's an existing relationship," says Roger Sellors, the inventory manager for Canadian Tire, explaining why, in part, D&A Video of Wasaga Beach, Ont., was selected as the vendor to outfit the new Canadian Tire store with a complete CCTV security system that offers managers greater accessibility and control. "They have done work for us [before] and we were happy with the quality of the work and equipment."

Founded in 1991, D&A Video specializes in the design, sales, installation and consulting of CCTV systems and equipment. Besides Canadian Tire, its client list includes the Ontario Provincial Police, Home Depot Canada and various Ministries of the Ontario Government.

Installation of the system began during the first week of April with the final phase ending two months later in June. Security was just one of the many concerns Sellors and the rest of the Canadian Tire staff at this location had to deal with during the construction of the new 80,000-square-foot concept store built in the parking lot of its predecessor, which has been serving the local community for the past 40 years. The Canadian retailer — which has 455 locations throughout Canada that serve more than three million customers every week — plans to open 350 new format stores similar to this one over the next several years. When it came to installing the video surveillance system, Sellors relied on the expertise of D&A, whose primary goal — similar to that of Sellors — was to offer Canadian Tire personnel the ability to identify people when they enter and exit a building. For Sellors, the system, as a whole, has to perform three functions on a daily basis: monitor, act as a deterrent and identify problems.

"Because of the size of the store and it being multi-level, we wanted something that would provide us with reasonable coverage, is easy to operate, and that would interface with our computer system," says Sellors. "First and foremost we need it for safety issues. You want to make sure that if there is an incident, there are no questions to what happened. Secondly, you want to be able to go back to identify the bad people, and thirdly, you want to be able to pick up suspicious people when you are monitoring the system."

To achieve all these goals, D&A installed 64 Panasonic cameras, including: the WVCP244 standard high resolution colour camera, with varifocal auto iris lenses; the WVCP474 SDII high resolution colour day/night camera with varifocal auto iris lenses for difficult lighting conditions; and the WVCW474A SDII high-resolution, vandal-resistant day/night camera for areas where the camera is vulnerable to the general public. On top of the 64 cameras, there are also 20 domes that do not contain cameras, but are fully wired should any future system expansion be required.

All of the images from these cameras are recording to four Panasonic WJHD316 digital video recorders that store 320 GB each. These units allow Canadian Tire to record all cameras in different combinations of standard time lapse and/or motion activated formats. On its own, a single WJ-HD316 DVR can control 16 live cameras at once and when networked with three other units, can control up to 64 cameras with one controller. The recorders in this particular application are configured so that a single keyboard can control the views of any camera from multiple monitors within the offices.

The entire CCTV system runs on Canadian Tire's network, which led D&A to hire an IT specialist, who could converse with Canadian Tire's IT staff in similar networking and computer terminology.



At Canadian Tire's newest store in Toronto, Ont., D&A Video Systems installed 64 cameras to watch over every one of its exit and entrance points, as well as point-of-sale transaction areas.



"What is very important is that we have good identification at the entrance and exits of the store, as well as at the register (point of sale) areas," says Steve Dunphy, president of D&A. "That way, if they have to go back to look at something, they have a very good picture to work with and that they can hand it over to the police for identification purposes. Typically, [the cameras] are located in high-traffic areas — areas that may be a potential for a lawsuit, as well as high shrink departments. For a store that size, it is very hard to get all the blind spots, but we have all the emergency exits covered and anywhere the customers might want to pocket small items."

Video can be monitored locally and remotely — even by Dunphy back at his D&A office, which provides them with the ability to perform any troubleshooting or maintenance without necessarily making the approximately one hour trek to the store's Toronto location.

According to Dunphy, the system achieves 35 days of video storage. This is accomplished because the system is set up to record at two images per second per camera during store hours, and only when movement is detected when the store is closed.

"Storage space is always an issue," explains Dunphy. "The main thing is that you get images per second; if you are too low, it is going to be very jerky and your subject can be in the picture one second and gone in the next frame. You have to have a good image capture rate so you at least get them walking across the screen. We play around with it so the customer is happy with the images per second that they are getting. We also can play around with the resolution rate to

ensure high quality playback."

During the system's commissioning, design and configuration, D&A, an authorized Panasonic dealer, received assistance from Spike Anderson, the regional account manager for the Central Region for Panasonic Canada's Broadcast and Security Department

"Steve (at D&A) had a good idea of what he wanted the system to do," recalls Anderson. "I assisted him with the design of the system, with regard to storage capacity, number of cameras that would be acceptable for the system, and how it all links together. He had a good idea of the total number of cameras based on the client's requirements. From that standpoint, the client had an idea of what the minimum video capture rate was going to be. From there, I punched in a formula we had created to figure out disk capacity and told him how large the storage capacity was going to be to get him to the number of days required."

It has been six months since the system was installed and according to Sellors, the system is working as planned. For him, the system is great for as he puts it, "I don't have to leave my desk to see what is happening."

Now that is a system that the entire staff of D&A Video can be proud of.

For more information on D&A Video Systems visit them online at www.dandavideo.com, or call them



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directly at 1-888-846-CCTV.