

Converting an Existing Analog Video Surveillance System to Digital



Does the changeover from analog to digital CCTV have to be an arduous process?

By John Mooradian

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Digital video surveillance systems are being installed in most new security systems today. But what will you do about an existing analog installation that will have to be replaced or upgraded to digital soon? You can eliminate a lot of pain if you run a digital system in parallel with the existing analog system, using the same cameras.

First, examine the current system and discuss with the users what they like and don't like and what they want to do with the digital system. This process allows you to tailor the many available features of the new digital products to your customer's wants. More importantly, it allows you to set up the new digital system software prior to or simultaneously with the hardware installation.

To begin, set up the new digital equipment near the existing system. To run the systems at the same time with the same cameras, disconnect the cable from the cameras at the multiplex unit and install a signal amplifier in each line. Then, attach a T-type connector to the end of each cable. Run one cable from the T-connector back into the analog system and connect another cable from the T-connector into the new digital server and ensure the older system will continue to operate as usual.

Configure the server to record either onto its internal recorder or onto a separate digital recording device, or both. Install a monitor and configure the system for the customer's convenience and optimal performance. You are now able to record and view up to eight cameras with the new digital system, while maintaining the older system in operation. Both systems should be fully operational at the same time.

You can eliminate a lot of pain, for you and your customer, if you run a digital system in parallel with the existing analog system, using the same cameras during the process.

Ask your customer for his or her opinion on how to fine-tune the system. Train him or her on the new system's features. Now, ask the customer to write down, after you're gone, whatever changes he or she may want to have done and what new features he or she will want enabled. Don't be afraid of not using all the system's features if the customer is not comfortable with or won't use them.

If you have fewer than eight cameras and they are all connected to the digital server and into the monitor, your on-site installation is complete. If you have more than eight cameras in the system, connect eight at a time into each server, adding servers as needed. For viewing, keyboard and mouse control, install a switch from all servers into single PC controlling the devices. To then have the ability to record all images, connect all the servers to a local area network (LAN), then to a single PC server, through a network switch and into a separate digital recording device.

Connect any remote-site hardware and software and configure it to your customer's requirements. Install any phone or Internet or LAN lines for transmission applications. Train the necessary personnel on the new client software and how to use the remote upload, download, record and transmit functions. Have them maintain a log and revisit them frequently until the system is fully operational, stable and satisfying the customer's requirements.

Usually, within a few weeks of using the new system, all operators will be familiar with and comfortable with its use. Disconnect the older system only after all personnel have been fully trained on the new system and they are comfortable with its operation and maintenance.

This simple step, of running both systems simultaneously, will be a little more time-consuming upfront, but, over the longer term, will more than pay for itself with increased customer loyalty, reduced complaints and fewer callbacks.