

### Overview:

Security and surveillance environments today often make use of personal computers (PCs) for monitoring and displaying the status of access control systems and alarm conditions. Often times, these PCs are located in remote locations, such as equipment rooms or utility closets. These types of inaccessible locations make viewing the displays from the computers inconvenient and impractical.

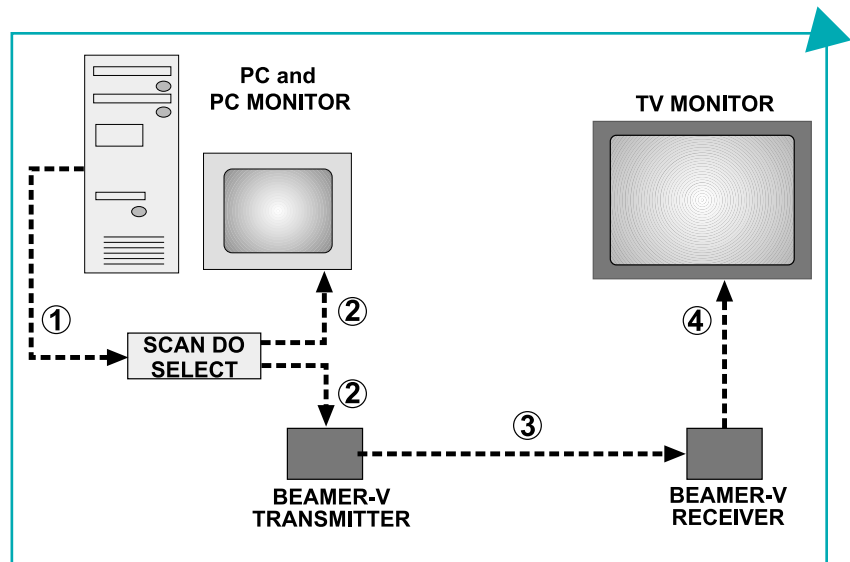
Rather than move the location of the computer to a less secure, more obtrusive location, there is an easy way to allow viewing of the computer's output on a standard, inexpensive video monitor, located wherever monitoring would be most convenient and effective. This TECHnique describes how Scan Do® Select, Communications Specialties' small, low cost and easy-to-use computer-to-video scan converter, can be used for just this application.

### Details:

Most surveillance and access control systems already have some form of a CCTV installation in place. Video cameras, placed around and within a property, transmit their video signal over coax or fiber optic cable to one or several central monitoring stations. However, the video signal, as generated by personal computers, is not in a format conducive for transmitting over such a system, nor can it be viewed on standard video monitors. This is where a scan converter is necessary.

Scan Do Select enables you to convert any PC's monitor output to a standard video (TV) signal, which can easily be integrated into an existing CCTV environment. By converting the computer video into standard NTSC or PAL format and then transmitting it to a central monitoring station, security personnel are able to view the video output from the PC right on the same types of video monitors used to view other surveillance activities.

The accompanying diagram illustrates how Scan Do Select might be added to this type of security system. Note that multiple monitoring locations may be established for viewing the PC's output. In addition, Scan Do Select allows for the con-



tinued use of the PC's monitor at the location of the computer, allowing for easy maintenance and interactive computer use.

The video signal from Scan Do Select (and from any surveillance cameras) may be routed to the monitoring area using either standard coaxial cable, or with fiber optic cable. For applications such as this, CSI offers an extremely cost-effective fiber optic video transmission system, called Beamer-V™, which transmits a high-quality video signal up to 1.5 miles over standard multimode fiber optic cable.

Because the picture quality on video monitors is never as good as on computer monitors, you may

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find that the PC's output, after being converted by Scan Do Select, lacks some of the small detail visible in the original computer image. However, by using a high-quality video monitor, you should find that the alarm, sensor and conditional access information is easily readable even after the conversion.

### Suggestions:

If color information is not critical, a high-resolution security black and white monitor may be used. You may also opt to use an existing camera monitor and feed the Scan Do Select's output into a switcher or sequencer along with the camera feed to save the cost, and space, of an additional monitor. If available, use a monitor with an S-video input for the highest resolution display. You can also record the PC's display information in either real time or with a time-lapse recorder for later review.

### CSI Products Used In This TECHnique:

- Scan Do Select ..... 1290
- Beamer-V ..... 3105

### Related TECHniques:

- Educational Guide on Scan Converters
- T-10 Using computer video and video splitters in security applications