

Tech Note - 24

Surveillance Systems that Work!™



Remote (Composite) Video Configuration

There are reasons in some video security systems to utilize the remote (secondary) video options that we build standard into our PC-Based DVRs. Some of those reasons may include:

- Crime deterrence
 - Placing a 32" to 42" monitor that can be viewed from a main entrance (for example) may tell prospective thieves, "Your on video – don't do it."
- Manager/Owner system monitoring (other than at the DVR)
 - The DVR may be located in a secure office on the premises while at the same time it might be advantageous for employees to view certain (perhaps obstructed areas of a store) while performing primary functions at a checkout counter
- View activity on certain (but not all) cameras – south fuel station pumps on one monitor and north fuel stations pumps on another (for example)
 - This is a more sophisticated remote video example but nonetheless one that we've installed at more than one center of the store located truck-stop fuel desk

Regardless of the reason(s), there are numerous times when on-site remote monitoring of video security systems is desirable.

The balance of this Tech Note is dedicated to assisting customers and installation personnel alike how to configure GSS PC-Based DVRs for remote video.

Hardware

Systems may be configured either with on-board (integral to the PC's motherboard) graphics or with separate (internal to the PC) video cards. If you know your application will require remote (composite connected) video it's a good idea to specify that at the time of order so in addition to any on-board graphics capability a separate video graphics card can be included in your PC build. While it may not be necessary (depending upon the hardware used to build your DVR), if your application changes and "down the road" you want to "add" remote on-site video it's not a significant process to add a video graphics card (if necessary).

Software

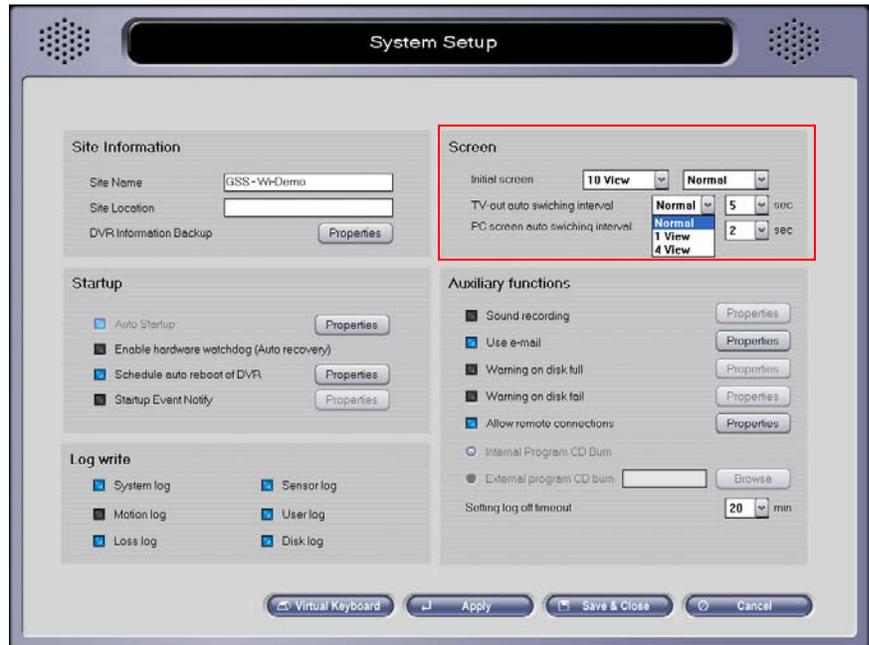
On PC-Based DVRs built with software versions 11.06.05 and later, the DVR software has a number of internal settings that can be used to configure your on-site remote video the way you want it to be displayed.

In DVR System Setup (see right) the upper right hand side of the screen has a section called **Screen**.

This is where the PC connected VGA monitor and the on-site remote (or composite connected) video is configured. We've highlighted this area in the **RED** box.

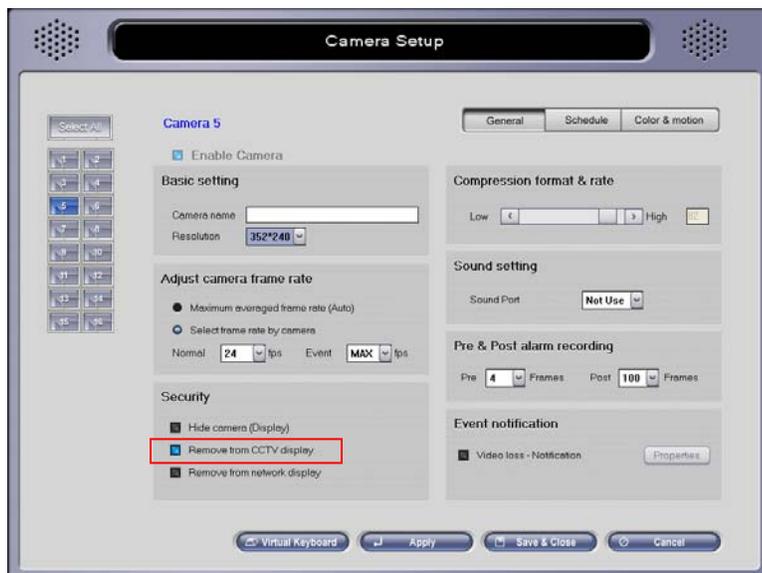
There are three (3) choices for remote video display:

- Normal
- 1 View, and
- 4 View



Normal means, whatever is displayed on the PC-Connected VGA monitor will be displayed on the remote monitor. **1-View** means each camera (that is desired to be displayed – more on that in a moment) will be seen full-screen and each ensuing camera will be displayed in order for the time period shown (5 seconds in the graphic above). The CCTV term for this is multiplexing. **4-View** means four cameras will be multiplexed at a time and again, for the time frame noted in the second box on the “TV out auto switching interval” line.

In some instances – perhaps an owner does not want the general public (or employees) to know the exact coverage area of certain cameras – it is desirable to NOT remotely display video from one or more cameras. If this is the case the camera’s TV-Out can be turned off.



The system’s software default is to display all cameras through the remote TV output.

Those cameras that are NOT to be seen remotely NEED to be TURNED OFF. This is accomplished on the GENERAL TAB located on the Camera Setup Screen (shown left).

We’ve highlighted in the **RED** box that clicking the box (it will turn blue as shown) will TURN OFF the remote display of Camera #5.

A camera "Turned Off" to the remote display will be handled differently depending if the system screen is set to display in **Normal**, **4-View** or **1-View** mode.

In Normal and 4-View modes, cameras that are turned off will be displayed but the screen is seen and blue only.

In the example (right) Cam-4 has been "turned off" to the remote display and the system has been set to 4-view mode. Note how Cam's 1-3 display as they should and that Cam 4 is displayed as blue. Cam-4 will also be shown in blue if the system is set up to display in Normal view mode.



If the System is set up in 1-View mode, each camera's video is multiplex one camera at a time in full screen mode and any cameras that have been turned off (to the remote display) will simply be skipped over.

In our example above, Cam-4 is turned off and when the System is set for 1-View, Cam 1 is shown then Cam-2, then Cam-3 then (skipping over Cam-4), Cam-5 is shown, etc.

When it is necessary to display some cameras to one remote screen while displaying others to a second remote screen it is certainly possible to do so but it requires more sophisticated engineering and some additional hardware. In these instances please consult with GuardDog Surveillance Systems Engineering for a more detailed explanation, required hardware and system connection drawings.

GuardDog Surveillance Systems, Inc.

N3183 State Road 16-26

Juneau, WI 53039

(920) 342-0703

WEB: www.guarddogvideo.com