

# HOW TO DETECT CAMERA TAMPERING IN REAL TIME

BY: Don McClatchie

FM SYSTEMS, INC.

When you discover tampering in a CCTV security system it normally occurs at the most vulnerable and exposed part of the system, the video camera. Normally the camera is mounted outside of the security of locked rooms and under the eye of the public. There are many ways to disable a video camera and render it useless.

For instance:

You can cut the cable carrying the video or power.

You can stick a pin through the video cable and short out the picture.

You can cover the front of the camera with a hat or a paper bag.

You can shoot the camera with a paint ball gun or any gun.

Most tampering employs one or more of these methods to disable the camera, and if the tampering goes un-noticed for any length of time the criminal will get away with the crime and there will be no video record of the deed.

One of the most common examples of tampering occurs at the loading dock where products are stacked up before or after a delivery. The criminal will block or disable the camera and then load the products onto a truck at the dock then just drive away. If you had been alerted to the loss of the camera video in real time you could have respond quickly to prevent the criminal from making off with the goods. It is a good idea to sell your customer on video loss detection before a loss occurs.

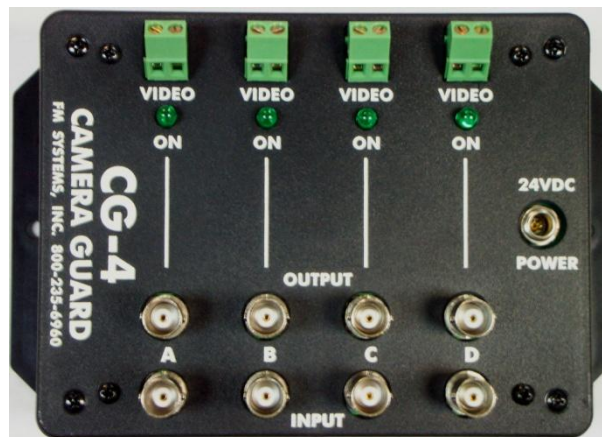
There is a device specifically designed to detect the loss of a video camera due to tampering, it is referred to as the Video Camera Guard "CG-4". The CG-4 will identify tampering or failure of cameras when it occurs, reducing the liability associated with extended and undetected loss of area security when cameras are rendered in-operative. The CG-4 increases the level of security by providing an alarm contact output to protect the integrity of the CCTV system.

The CG-4 Camera Guard can be connected anywhere between the camera and the Monitor equipment in the video path. You can connect it near the camera to activate a local alarm, or at the monitor location to alert guard personal or shut down equipment. It provides a "Loop- through Input" that will not affect the picture quality or the video level. The unit detects a loss of SYNC or luminance (White) that indicates the power to the camera is off, the coaxial cable is "disconnected", the camera lens is covered, or the Wireless Transmission system/Fiber optic system has lost its signal.

Use this unit in any CCTV installation that requires guaranteed continuous video monitoring. Use the CG-4 to monitor the cameras in sensitive areas like loading docks or any area subject to the unauthorized movement of product or stock. Or use it to determine if you have an intermittent failure problem in any CCTV system.

The **CG-4 Camera Guard** system supervises the continuity of four separate video signals from CCTV cameras. This supervisory system will identify loss of any video signal due to removal of the camera, loss of power to the camera, a camera cable disconnect, or a defective camera. The CG-4 supervisory system continuously displays the "video on" condition of 4 cameras, with individual L.E.D. indicators for each video channel. Use it to monitor video cameras and shut down un-attended gas pumps if the video camera is tampered with.

Normally Open or Normally Closed Alarm contacts are provided for each channel to send an alarm or activate equipment when loss of video occurs. These contacts are field programmable for Normally Open or Normally Closed contact operation. This unit can be connected to a local alarm to alert monitor personnel that a camera is being tampered with or send a message to a remote site by connecting the alarm output to external dialing equipment. It can be used to shut down equipment such as gas pumps when the video fails. The CG-4 has an easy mounting flange that will mount to any surface with just two screws and is supplied with a 24 VDC power cube.



This unit can also be used to protect and alarm video monitors placed into public areas where theft of equipment is a concern. The CG-4 can be set to monitor the termination of the video signal so if the end of line equipment is disconnected from the video cable an alarm can be activated. A contact output will switch if the video cable is removed from the equipment.

This product can be purchased from FM SYSTEMS, INC. 800-235-6960.