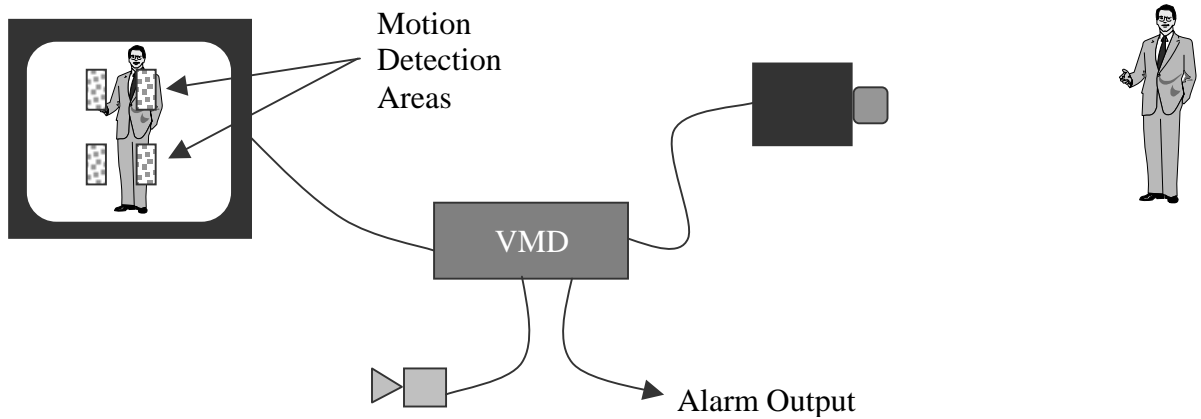


Video Motion Detection

Video motion detectors (VMDs) analyze video signals from a CCTV camera for changes in brightness and/or contrast in specific areas in the camera's view. VMDs can give a relay output to activate a recorder or a local alarm. VMDs can be used to automate the surveillance system, alerting only when attention is required.



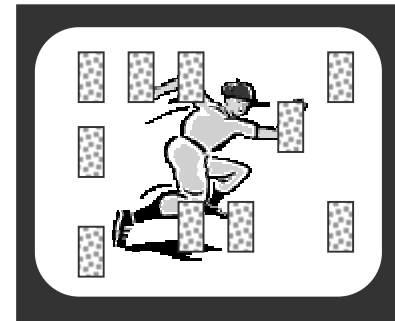
Analog vs. Digital

Analog VMDs are very basic in operation and function. They allow positioning of two to four dots or lines on the screen. Any changes in the brightness or contrast in these areas is considered an alarm. Digital VMDs offer enhanced operation. They allow multiple areas of sensitivity that are programmable. The sensitive areas may be adjusted to respond to a certain percentage of or type of activity. Some units can even be adjusted down to the pixel level.

Analog



Digital



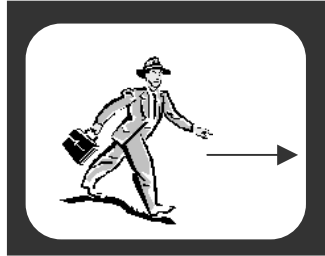
VMDs and Outdoor Cameras

VMDs can be used on outdoor cameras, but a higher quality digital VMD should be used. Wind blowing trees and the sun going behind clouds will look like motion to a VMD. A digital VMD with a programmable motion threshold will help reduce this type of false alarm. Unfortunately, no outdoor camera VMD is completely immune from false alarms.

VMD Special Features

Some VMDs offer special features such as directional analysis, trace mode, and museum mode. Directional analysis causes an alarm when a motion goes in one direction but not another. Directional analysis is commonly used in controlled entry/exit applications to watch for people going against the normal flow of traffic to avoid a security measure. Trace mode provides a tracking highlight after motion has occurred. This feature is used to track where a target has been and where it is possibly going. Museum mode monitors a stationary object and

alarms upon its removal. This feature is common in museums and other places where stationary objects may be removed.



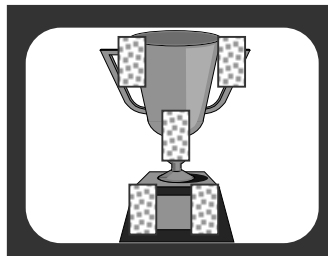
Left to Right – No Alarm

Directional Analysis



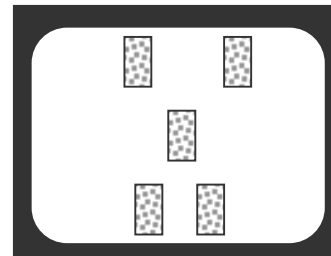
Right to Left – ALARM!

Trace Mode



No Alarm

Museum Mode



ALARM!

This document is part of a complete book entitled:
CCTV System Design & Installation

By Charles Aulner and Bryan McLane
COPYRIGHT © 2005 Charles Aulner and National Training Center, Inc.

Used by permission of the Author

To order the complete copy of this and other books, visit
www.NationalTrainingCenter.net

National Training Center provides the very best in training resources to the Security professional. These resources include:

- Training manuals and references
- Live classroom training
- Online classroom training (instructor led)
- Online training (self-paced)

We support and encourage NICET Certification



NationalTrainingCenter.net

The Very Best in
Training and Books

(702) 648-8899