



▲ VideoControlRoom's monitoring center is staffed with skilled IT personnel



▲ Detectors are deployed to catch human intruders

Busting False Alarms

Alarm detectors are among the oldest products on the market, yet still experience high instances of false alarms. Michael Brown, Managing Director of VideoControlRoom, challenges the market to deliver detectors that eliminate false alarms while reliably detecting intruders.

SUBMITTED BY VIDEOCONTROLROOM

With the abundance of bandwidth and the explosion of video technology, it is a foregone conclusion that security monitoring will be dominated by remote video alarm verification — a service delivery that illuminates detector performance like never before.

Finding suitable detection providers is imperative for this new market. VideoControlRoom, an Australian pioneer in the field, hopes to identify major detection providers with *A&S International*.

For the old model of text-based security monitoring, demanding

highly stable detection was not as important to the security vendor. All around the world, security companies earn revenue when detectors activate, as they call the customer and dispatch a guard to the site.

In the Australian security market, security companies earn money in the form of a telecommunications rebate. Every time an alarm panel dials the control room receiver, the central management station earns a 12-cent rebate.

With a large portion of revenue dependent on false alarming detectors, it is clear why security

organisations have settled for good — but not great — detection technology.

'GOOD' NOT GOOD ENOUGH FOR VIDEO MONITORING

Video monitoring introduces some interesting factors that raise the bar for detector performance.

- (A) The number of false and positive alarms can be quantified
- (B) The customer has visibility of alarm causes
- (C) Many more detectors can be put outdoors

Customer can search their DVRs and see an event was not caused

Outdoor Detection with Video Monitoring				
Example	False alarms per Month	Cost per Response	Monthly Total	Yearly Total
Product A	50	\$5	\$250	\$3,000
Product B	20	\$5	\$100	\$1,200
Product C	2	\$5	\$10	\$120

Indoor Detection with Guard Response				
Product A	5	\$60	\$350	\$4,200
Product B	2	\$60	\$180	\$2,160
Product C	1	\$60	\$60	\$720

by an intruder, but environmental factors like birds, cats or bushes.

While the video has saved a guard callout or prevented clients from attending the site themselves, at the end of the day, customers want a “human” intrusion detector. Anything less causes a rise in costs and the erosion of value for money.

ECONOMICS OF DETECTION

Every time a detector sends a false alarm, it must be dealt with by monitoring company. This response has a cost (see “Outdoor Detection with Video Monitoring” and “Indoor Detection with Guard Response” above).

In the old model of indoor

detection with guard response, the cost per event is counted as revenue to the security company, so it is accepted up to a point.

In the video monitoring world, it is much harder to get the client to accept the costs, because the cause of alarm is transparent. The liability for the response is pushed toward the security company.

Regardless of who pays for the false alarm response, a frequently false alarming detector can consume many times its purchase price in alarm responses.

In the future, video monitoring will provide value-added smart video services, such as programming cameras for retail traffic counting,

point of sale fraud detection and parking control. Control rooms will struggle to offer these services if bogged down with false alarm events.

BETTER OUTDOOR DETECTION

VideoControlRoom is the first Australian company to focus solely on video monitoring, installing the largest number of conventional outdoor detectors in the country.

With the company’s scale, it has become apparent the current range of outdoor detectors used false alarm too often and are priced too high for mass consumption.

To solve this problem, VideoControlRoom partnered with A&S to challenge detector manufacturers. VideoControlRoom will accept outdoor detector samples and test them side by side at live video monitored sites.

Top performers will receive global recognition when the results are published in the April 2009 issue.

WHY AN OUTDOOR DETECTOR CHALLENGE?

Due to higher installation costs,



▲ Rabbits can cause false alarms from detectors



▲ Flapping materials can create false alarms



▲ Bushes moving in the wind create false alarms

video monitoring lends itself to outdoor monitoring and the protection of high value assets, where the alternative in many Western countries is expensive on-site guarding or patrolling manpower.

Evaluating outdoor detectors is an important test, as the environmental factors that affect outdoor detectors also affect indoor detectors, only with more frequency and concentration.

If the outdoor false alarm problem is solved, then we have nailed the indoor false alarm problem as well. This benefits owners of security systems, who ultimately pay the price of false alarms.

VIDEOCONTROLROOM'S EXPERIENCE

VideoControlRoom has been involved in video monitoring for seven years, after replacing manpower at a site with integrated electronics and video services.

Our approach to video services is based on alarms and DVRs. Companies want these systems for their core functionality, like alarm panels and digital video recording,



▲ Video with alarms lets users see an event was caused by an intruder, instead of environmental factors like birds, cats or bushes.

so it makes sense to leverage these platforms.

Our aim is to reduce the cost of buying an integrated alarm and video system that delivers video alarm verification and other services. We hope that it costs no more than buying an alarm system and a DVR that deliver text based alarm monitoring and local video recording.

At that point it makes sense, as the customer has the option of a US\$5 video alarm response as opposed to a \$60 to \$80 guard callout. And if the \$5 video alarm response is occurring on human intrusion only, the value of the service is immense.

This is especially true, as video verification allows operators to call

police or intervene with a remote public address.

FUTURE OF DETECTION

We want to work with manufacturers keen to build products for this information rich security world. VideoControlRoom encourages manufacturers to plug products into our video monitoring network, to retrieve performance statistics that illuminate real performance and drive product improvement.

Long-term, we believe that the ultimate solution in eliminating false alarms will be the “and” function, which is to receive an alarm event only when both the detector and the video motion detection is activated. No single detection source is infallible, as we have found using world-class video analytics, which are corrupted by a spider sitting on the lens.

As we work towards getting our model right and the price right, it is important to find the world’s best detector that will form half of this solution.

In terms of form factors, we see a range of composite cameras combined with detectors and lights, replacing separate cameras and detectors. We are excited this detector challenge will tell us who we should be working with, as we grow our global video monitoring franchise. **AS**



Image Name : Camera 13 : Rear Yard Fence - 21/	
Details	
Site	1221
Name	
Save to file time	23/09/2008 9:51:58 AM
Operator	MICHAEL
Unit PCB Serial Number	05471011
MAC Address	00-D0-3B-00-39-AA
Image Validation	Passed - Image integr

▲ Birds can trigger false alarms



Image Name : Camera 18 : Blue Stone Build - 18	
Details	
Site	1008
Name	
Save to file time	23/09/2008 9:52:34 AM
Operator	MICHAEL
Unit PCB Serial Number	05271901
MAC Address	00-D0-3B-00-36-2D
Image Validation	Passed - Image integr

▲ A cat creates a false alarm