

Digital video technology doesn't stop at conventional security - it's capabilities stretch to a comprehensive range of market applications...

- Banking
- Retail
- Gaming
- Systems integration
- Dome cameras and accessories

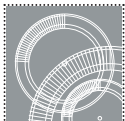
Please contact your local customer service team for our vertical market brochures, or visit the website



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LOSS PREVENTION YOU CAN COUNT ON





WELCOME

Dedicated Micros' reputation has been built on the high quality and reliability of our products and support. As a specialist manufacturer for over 22 years, we've spent millions of man-hours developing and fine-tuning our systems. Nothing demonstrates this more than the launch of the latest products to our Retail Solutions range – each providing new solutions for your business.


THE RETAIL CHALLENGE

At Dedicated Micros we know that the trust you place in the integrity and quality of your video surveillance is paramount; which is why we take our security business so seriously – we know that as a retailer you can't afford to take risks.

According to the latest National Survey of Retail Crime and Security, inventory "shrinkage" is estimated to be equivalent to 24% of retail profits, with both employee and customer theft an increasing problem.

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The Retail Solutions range of Digital Video Recorders (DVRs) and video servers from Dedicated Micros can make a real difference to your bottom line by detecting and deterring theft on both sides of the counter. From convenience stores to nation-wide chains, Dedicated Micros has an **RS** unit to suit your retail application and budget.



THE C-STORE SOLUTION

The system is fully networked allowing the owner to remotely monitor the premises and review exactly what's going through the till

>> THE CHALLENGE

An independent retailer and member of a nationwide symbol buying group, is based on a housing estate in Greater Manchester, an area local police describe as troubled.

They have a persistent problem with shop lifters alongside local trouble makers entering the shop. The owner also suspects that she is suffering from significant internal stock shrinkage, but using her current observation system hasn't been able to catch the perpetrators in the act.

The challenge was to monitor and eradicate problems with internal shrinkage, as well as create a secure environment for staff and shoppers alike.



>> THE SOLUTION

The owner invested in a 2040 indoor dome camera and the Retail Solutions version of DM's four camera D4 DVR.

The **RS** version of D4 works by associating POS transaction data with the relevant CCTV footage. By positioning one of the four cameras covertly over the till, all recorded video is irrefutably associated with the till transaction data entered by the shop assistant.

The system is fully networked allowing the owner to remotely monitor the premises and review exactly what's going through the till – and who is operating it – from the comfort of their own home PC.

The extent of stock shrinkage problems soon became apparent. Shop assistants would ring goods through incorrectly at the till, charge the customer the correct amount and pocket the difference. Over the course of a busy day, individuals were able to defraud quite considerable sums of money. Through identification and eradication of these problems takings have increased significantly more than paying for the cost of the installation.

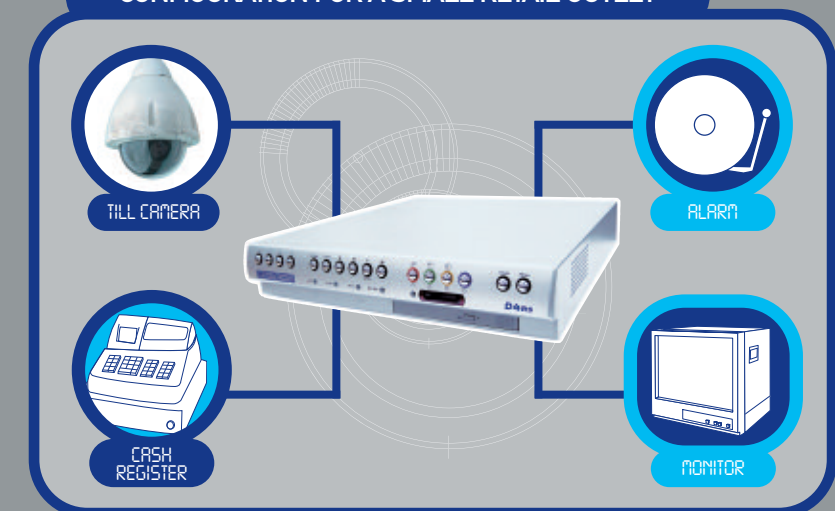
Staff used to struggle to get a police response for calls regarding local trouble makers. So the installer recommended positioning the 2040 dome above the door, enabling D4's video motion detection (VMD) facility to be triggered each time a person entered the shop. The installer configured D4 **RS** to record in real time each time the VMD was triggered thereby recording high quality footage of each customer walking through the door.

Now when staff have trouble with a particular customer they are able to locate video footage quickly and easily

using GOTO time and date facilities; then make a copy of the relevant video to CD using the D4's internal CD-R writer to hand to police. But sometimes pictures don't tell the whole story. Not only does the CD contain images of the suspect but records audio along with the images.

The store and local police now have a close working relationship. Due to effective security surveillance, they are the only shop in the area allowed by the licensing magistrates to sell spirits from open shelves rather than storing spirits behind the counter or perspex screens.

CONFIGURATION FOR A SMALL RETAIL OUTLET



SOLUTIONS FOR HIGH STREET RETAILERS

>> THE CHALLENGE

A nationwide retail chain was looking for a way to combat the growing problem of shoplifting and a spate of night time break-in attempts. All 24 stores in the chain were to be monitored via a central security control room, with up to 3 mobile security guards per store.

>> THE SOLUTION

The installation company worked with the Head of Loss Prevention for the high street chain. For each store they specified a 16 camera system based on Dedicated Micros Digital Sprite 2

DVRs linked to an intruder alarm system, 2 x vandal resistant 2060 dome cameras for the exterior of each building, two 2040 indoor domes to track suspected thieves and 12 fixed cameras to cover various concessions within the store.

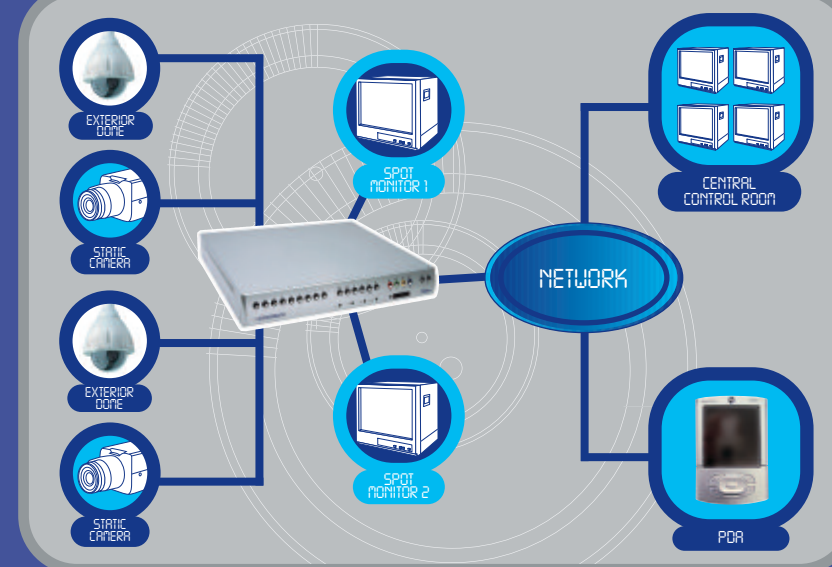
Spot monitors were also invested in for each premise to act as a visible deterrent to any would be shop lifters, and help reassure customers and staff of a safe secure environment.

The 2040 indoor domes feature a x27 electronic zoom with the ability to track people passing under the dome

with a full 180° tilt mechanism, perfect for tracking suspected shop lifters around the store and zooming in on any slight of hand activities.

Wireless technology was employed so store managers and security guards could access live images from hand-held PDAs. In this way, the DS2 in the central control room could send camera images of an incident to the guard's PDA for immediate visual verification of the suspect, as he approached the scene of an incident.

CONFIGURATION FOR A MEDIUM RETAIL OUTLET



and the digital system produced such clear pictures that the police have been able to secure a conviction each time a thief was apprehended.

To tackle the problem of night-time break-ins, the installers set-up an intelligent response system. When the alarm is triggered the 2060 domes revolve instantly towards the action with the Digital Sprite programmed to increase the record rate to real-time. The Loss Prevention Manager was delighted with the results. Vandals even attempted to sledge hammer the domes but the 2060's die-cast

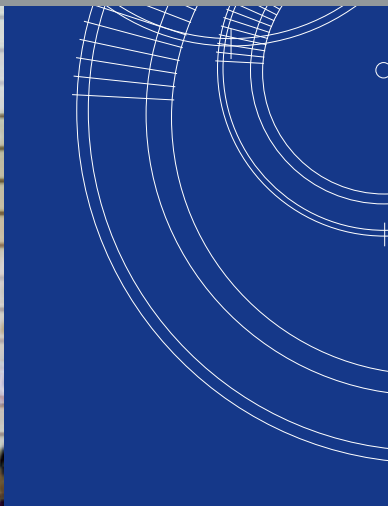
aluminium housing left the cameras unaffected by the attack. The built-in day/night camera ensured perfect picture capture even in low light levels and the intuitive easy-to-use menu structure made the task of monitoring a breeze for operators in the central station. Over-all attempted break-ins and acts of vandalism decreased by 75% within three months of completion of the installation program.

[The 2060's die-cast aluminium housing left the cameras unaffected by the attack]



THE DEPARTMENT STORE SOLUTION

[DV-IP retail has the facility to accept up to 14 POS text inputs, allowing our client to quickly and simply record and associate POS transaction data with the relevant video]



>> THE CHALLENGE

With long opening hours and a prime location at the heart of the capital's shopping district, security was a key management issue for a major department store on London's busy Oxford Street.

Professional shop lifting gangs and internal stock shrinkage were beginning to have a serious effect on profitability despite an investment in PC-based security coverage.

Having experienced problems with unreliability, regular system crashes and enforced downtime for proprietary software updates, the management decided to switch to Dedicated Micros' DV-IP Retail.

In an active shoplift situation, picture quality is clearly paramount, not only for recognising and observing known offenders but also for producing evidence for subsequent prosecutions. The department store was therefore keen to stick to a digital format – but one they could rely on 24/7.

The management also needed to address problems of internal shrinkage. Stocking some of the fashion world's most prestigious brands including Chanel, Dior, YSL, Burberry and Versace; was proving too much of a temptation for shop floor staff.

>> THE SOLUTION

DV-IP Retail offered the ideal solution for a multi-level building such as a large department store, as it allowed analogue cameras to be bridged onto the store's existing IT network, rather than running bundles of expensive coaxial cable through floors to a central point. As well as limiting the number of cameras and where they can be positioned; a traditional coaxial based solution can often prove disruptive to install – not an option for a department store based on Europe's busiest shopping street.

The drop-in capability of the DV-IP server vastly reduced the cabling time, cost and complexity of installing the new CCTV system and greatly

improved convenience of access to images by allowing users to view live and recorded images from any PC on the department store's IT network.

Possible future expansion was also an important consideration for this well known retailer. The built-in flexibility of the DV-IP makes it possible to expand a security system gradually. An additional unit can be dropped into a convenient point on the network to take in any additional cameras. The cost per camera is dramatically reduced as the size of the installation grows

DV-IP Retail also addressed the IT manager's trepidation about clogging up their computer network with bandwidth heavy CCTV images. By using MPEG-4 the DV-IP transmitted low-bandwidth images on demand to security staff, but recorded evidential quality high resolution JPEG images to the DV-IP's internal hard disk. This also ensured that in the event of network failure images were continuously recorded to hard disk.

In addition the DV-IP Retail also dealt with the problems they'd previously encountered with their old PC based system. All Dedicated Micros products employ an embedded non-PC based operating system, which means that the DVR won't hang or crash and is immune from computer virus attacks even though it's connected to a local area network.

Covering such a large store wasn't easy for security staff particularly as they often had more than one incidence of theft at the same time. Staff needed to view images from multiple units concurrently, so using the DV-IP's software development kit the integrator built a graphical user interface or GUI, providing graphical layout of the store ensured that security staff could learn a list of camera locations cameras are stored in the store they simply drill down through the graphics by clicking on a floor, then each concession and finally the relevant camera; thereby allowing staff to concentrate on the security task in hand.

Finally the DV-IP Retail addressed the problem of internal shrinkage. The unit has the facility to accept up to 14 POS text inputs using no additional equipment, allowing our client to quickly and simply record and associate POS transaction data with the relevant video. Security staff were then able to examine video and

associated text for instances of internal theft such as sweet-hearting and under-ringing.

In one instance the store's management team ear-marked particular concessions where a stock take had unearthed suspicious discrepancies, such as a depleted stock of high value goods and large amounts of comparatively low value stock that their records showed as sold.

Transaction data on the unit's hard-disk was interrogated using text search parameters of goods sold. An unusually high number of silk scarves priced at £29.99 had been



images provided by DV-IP Retail secured a conviction.

SOLUTIONS FOR SHOPPING MALLS



With an analogue solution we'd have to change tapes every 24 hours. With BX2 CA we schedule hot-swap of drives every 2 months*

* Recording at factory default settings of 6PPS with 18KB file size

>> THE CHALLENGE

A premier shopping mall based in Glasgow was looking for an alternative solution to their analogue tape libraries. The mall is a 3-floor complex comprising of 98 retail outlets, a food court and health club. With long opening hours and a prime location at the heart of the capital's shopping district, security is a key management issue.

The Head of Loss Prevention required a three month archive of video footage to be kept for a three month period. However an analogue solution was ruled out due to concerns over poor image resolution. The management brought in retail security specialists to advise on the best digital upgrade.

>> THE SOLUTION

To meet the requirement of a three month archive, the installers recommended the BX2 Continuous Archive (BX2 CA) solution. The BX2 offers RAID1 mirroring technology and removable drive caddies to allow continuous archiving of all recorded digital video footage.

regular hot-swap of mirrored drives ensuring that the solution met requirements for a three month archive without interfering with recording.

The BX2 Continuous Archive also guarantees that all data has an identical backup copy that can be used in the unlikely event of disk failure, thereby providing extra peace of mind for the loss prevention team at the shopping mall.

The BX2 Continuous Archive also



addressed concerns regarding the removal of data for police analysis. Store detectives and security personnel can spend several hours tracking suspected shop lifters and petty thieves - far too much footage to

be burnt to CD. Direct removal of hard drives allows the entire digitally signed video content to be made instantly available to police.

CONFIGURATION FOR A SHOPPING MALL

