



ATM machines operate a service of convenience, which is taken for granted by most of the general public, however these cash points are open to abuse by the criminal underworld. Popular crimes include; card skimming, shoulder surfing, and plain straight forward theft.

To help the financial sector combat ATM crime, and the fraudulent use of debit/credit cards Dedicated Micros designed the DV-IP ATM. The unit is specifically sized for installation within the confined conditions of an ATM machine. DV-IP ATM processes transaction data which is then recorded with the video footage. Post event analysis via the built in text search engine provides video imagery of the ATM user plus transaction information. This will then allow the branch customer services team to quickly resolve any genuine withdrawal disputes. Coupled with a monitor the spot output provides a visual deterrent assuring customers that the facilities are secured as an active CCTV system.

DV-IP ATM is a professional network video server, and is designed to meet the demands of 24 hour video surveillance using new or existing IP enabled computer networks.

The DM range of video servers provide a costeffective means to record and distribute video from your CCTV cameras to any computer on the network, anytime, anywhere.

DV-IP ATM records high quality images locally in M-JPEG format, ensuring recording continues in the event of a network failure, the unit also features data streaming in MPEG-4<sup>1</sup>, format, for efficient data transmission over low bandwidth connections.

The units also feature false alarm management, tamper-proof alarm-handling, secondary signalling, fault tolerance and comprehensive system logs achieving full compatibility with BS-84182, critical for central monitoring station applications.

# Benefits

- 4 CAMERA INPUTS
- HIGH QUALITY JPEG RECORDING AND MPEG-41 COMPRESSION FOR LOW BANDWIDTH PLAYBACK/LIVE VIEWING
- DESIGNED FOR CENTRAL MONITORING APPLICATIONS (BS-841821, 2 COMPATIBLE)
- AUTOMATIC CONNECTION TO REMOTE VIDEO RECEIVING CENTRE ON ALARM
- SPOT MONITOR OUTPUT WITH SEQUENCE FUNCTION
- COMPATIBLE WITH THE ATM INTERFACE MODULE FOR INTEGRATION WITH SERIAL OR ETHERNET BASED ATM'S
- HIGH RESOLUTION VMD, 16 ZONES SELECTABLE PER CAMERA
- BUILT-IN WEB SERVER
- ALARM INPUTS CONFIGURABLE FOR TAMPER OR NO/NC OPERATION
- RELAY OUTPUTS, AUTOMATIC OR MANUAL OPERATION
- TRANSMISSION OVER ETHERNET, DSL, CABLE, ISDN AND PSTN\*
- HYBRID SYSTEM WILL NOT STOP RECORDING EVEN IN EVENT OF NETWORK FAILURE
- UNINTERRUPTED RECORDING, DURING PLAYBACK, BACKGROUND IMAGE ARCHIVING, MULTIPLE USER VIEWING
- FULL DUPLEX AUDIO WITH RECORDING
- DHCP COMPATIBLE
- BANDWIDTH LIMITATION FOR ETHERNET/DIAL-UP NETWORKS
- 24/7 SCHEDULING, 10 HOLIDAY PROFILES
- SDK AVAILABLE FOR PROJECT CUSTOMISATION

\*VIA SUITABLE MEDIA INTERFACE – E.G. ROUTER

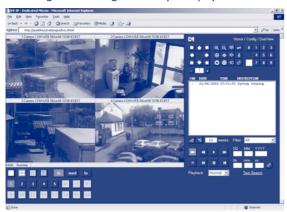


# Professional Network Video Server

The DV-IP ATM range features a 4 input video server capable of recording up to 50pps PAL/60pps NTSC. DV-IP ATM is based around an embedded real-time operating system, providing a reliable and cost-effective way of digitising, recording and distributing high quality video across a network or internet to a viewer's PC.

#### **NETWORK CONTROL**

Control of DV-IP ATM is achieved over Ethernet either by proprietary software or via a standard web browser. Preloaded WebPages allow for setup, configuration, image archiving, live viewing, telemetry and playback.



Control of the DV-IP ATM using a standard web browser

DV-IP ATM is compatible with DHCP for automatic IP address assignment, the unit also supports manual IP settings. Video 'Bandwidth Restriction' ensures image transmission only uses allocated bandwidth.

# **RECORDING**

Simultaneous recording and playback from any camera continues uninterrupted whilst other images are being viewed live. The DV-IP ATM also allows for the resolution of viewed images to be dynamically altered maximising live viewing performance over the available bandwidth.

# **LOW BIT RATE VIDEO**

MPEG-4<sup>1</sup> is a video compression standard which provides a means to distribute live/recorded video over low bandwidth or bandwidth constrained networks efficiently. This functionality is independent of the recording process. High quality M-JPEG images may be downloaded separately if required for evidential or archiving purposes.

#### **TEXT INTEGRATION**

Using the ATM Interface Module (available separately) transaction data can be captured. The ATM Interface Module interfaces with the ATM machine via SDLC or Ethernet, the native protocol is then processed, reformatted and passed on to the DV-IP ATM for recording with the video. It is possible to perform retrospective searches on captured text via the pre loaded web pages and other text enabled DM applications. The SDK offers developers text specific tools enabling integrators to create powerful custom applications.

#### ALARMS

4 (selectable tamper or NO/NC) and I (NO/NC) alarm inputs allow for the integration of PIR, teller panic buttons and safe door contacts etc into the CCTV system. Using the alarms in tamper mode allows the type of alarm to be determined e.g. tamper, warning low resistance, warning high resistance etc. 2 light duty relay outputs are also provided offering further flexibility in executing remote tasks such as remotely switching on lights, opening doors and barriers. Relay outputs can also be configured as part of an alarm response and executed the split second the alarm is tripped. Unlocking DV-IP viewer provides alarm receiving functionality (RVRC) where notification of alarms can be over Ethernet, PSTN or ISDN ensuring incidents are never missed.

# REMOTE CONTROL

DV-IP ATM can be configured to emulate a remote keyboard offering control of third party matrix connected telemetry cameras. Supported matrices include Ademco/VCL, American Dynamics, and DM star commands.

# **SECURITY**

DV-IP ATM features a built-in firewall for network intrusion detection and protection. Network PING responses can be disabled, meaning it is no longer possible to discover the DV-IP Servers IP address using automated subnet scanning software. This coupled with the Trusted IP addresses list and the ability to open/close specific TCP and UDP ports ensures the DV-IP ATM is configurable for use on any network large or small.

# Specification

# **CAMERAS**

- 4 inputs
- IV Pk-Pk Video Input (non looping)
- PAL, NTSC
- Colour, Mono mix
- $75\Omega$  Camera Termination provided in software

#### **MONITOR OUTPUT**

- I Analogue spot output (IV Pk-Pk)
- Full screen
- Full screen sequence

#### COMPRESSION

- M-JPEG (Video)
- MPEG-41 (Video)
- ADPCM (Audio)
- User definable image file sizes

## **RESOLUTION**

- Sample rate 13.5MHz to CCIR 601

PAL - 640x256, 720x256, 768x288, 640x576, 768x576 NTSC - 640x240, 720x240, 640x480, 720x480

MPEG-4<sup>1</sup>

#### RECORDING

- 50 PPS PAL
- 60PPS NTSC
- Variable record rate selectable per camera
- Simultaneous, recording, viewing, playback
- Time/date stamping of all images
- Event recording
- Looped recording

#### **AUDIO' (MONURAL)**

- 2 x Audio Inputs Phono
- Full bi-directional audio with recording on each input software selectable
- 8Khz Sampled
- 47KΩ input impedance
- 2 x Audio Output Phono
- 47KΩ output

## **NETWORK SUPPORT**

- 10/100 BaseT Auto Negotiation (or forced 10BaseT)
- Network Protocols Supported; IP, TCP, UDP, DHCP, FTP, TELNET, ICMP,
- Configurable port numbers for HTTP
- Built-in firewall for network intrusion detection and protection

# **SERIAL PORTS**

• 4 x Full RS232 Serial Ports (9 Wires)

# **SERIAL PORT OPERATIONAL MODES**

PPP, Matrix Control, Debug, Text In Image

# **FRONT PANEL STATUS**

- Network activity
- HDD activity

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	IMAGE QUALITY*				
	LOW	MEDIUM	HIGH		
	I4K	18K	25K		
RECORD DURATION		DISK SIZE			
I day	4.8GB	6.2GB	8.6GB		
7 days	33.6GB	43.4GB	60.2GB		
30 days	144GB	186GB	258GB		
60 days	288GB	372GB	516GB		
90 days	432GB	558GB			

\* 4PPS global used as a benchmark for above calculations.

#### **INTERNAL HARD DISK STORAGE**

• Up to 600GB maximum at the time of going to press

#### **MATRIX CONTROL**

- Ademco VCL RS232
- American Dynamics RS232
- DM Star Commands RS232

# **ALARM CONTACTS**

- 5 x Alarm Inputs Total
  - 4 x General Alarm Inputs (tamper<sup>1,2</sup> or NO/NC selectable)
  - I x Global Alarm
- Normally Open/Normally Closed software selectable
- Tamper selectable<sup>1, 2</sup>

# ALARM SUPPORT (Including BS84181,2)

Tamper (Resistance)
 0 - 800Ω

Tamper (Short circuit) Warning - low resistance Normal ( closed ) 800 - 900Ω 900 - I.2kΩ Warning - high resistance I.2 - I.3 kΩ Alarm ( open )
Tamper ( Open circuit ) I.3 - I2 kΩ above 12 kΩ

Voltage Free Closed contact operation

- VMD Trigger
- Camera Fail Trigger

# BS-8418 SUPPORT 1, 2

- Tamper proof alarm inputsNuisance detector management
- Application watch dog
- Comprehensive system logs
- Secondary signalling support via relay contact
- Modem port for secondary signalling
- Relay system set/unset notification
- Entry/Exit routes for alarm inputs

# **RELAYS**

• 2 onboard light duty relay output (500mA @ I2V-48V Max)

All relays are selectable for the following;

- Global alarm/user definable
- Global VMD/ user definable
- Global camera fail/user definable
- Set/Unset notification (BS8418<sup>1,2</sup> support)
- Primary signalling failure (BS8418<sup>1,2</sup> support)
- User definable

- VIDEO MOTION DETECTION
  80x64 pixel VMD detection resolution
  Programmable VMD grid with 16 individually definable zones per camera
- 3 different modes: Static, Last Trigger, Normal
- User-definable sensitivity for each zone
- Pre and post activity recording, definable by user
- Change camera recording rates on activity
  Notify user of activity over Ethernet, ISDN and PSTN
  Stores all VMD instances in events database
- VMD images can be protected on HDD
- Global VMD relay
- Linkable to alarm zone

# **IMAGE PROTECTION/UNPROTECTION**

- All images tagged as an alarm will be automatically protected
- Non alarmed video footage may be user selected using time/date, from/to for image protection.
- Protected images may be manually unprotected

## **DIGITAL SIGNATURE**

• Automatic MD5 Finger Printing on FTP download and on demand via software GUI

#### **ARCHIVING**

All archiving is achieved via FTP on Scheduled Polled Manual request (time/date from/to)

#### **SCHEDULE**

- 7 day schedule
- 10 definable holiday schedules

## **AUTHENTICATION**

· Configurable password over network for;

Viewing

Playback Configuration

Telnet

**FTP** 

Serial port configuration

# **MULTILINGUAL SUPPORT**

- English
- Spanish
- French
- Italian Dutch
- Russian
- German
- Portuguese
- Turkish Danish
- Croatian • Finnish
- Norweigen
- Hungarian
- Swedish
- Polish

# Arabic

#### SUPPORT APPLICATIONS

- DV-IP Viewer
- VCR Playback Utility
- Watermarking Utility
- Database Editor
- Backup Utility

#### **BROWSER SUPPORT**

- IE 5.5 and Above
- Netscape 4.7 and above

# **DEVELOPERS SUPPORT**

• Java (Via the DM SDK Software Developers Kit)

#### **TEMPERATURE RANGE**

• Operating Temp 5 to  $45^{\circ}$ C (41 – 113 °F)

# **RELATIVE HUMIDITY**

• 5% to 85% Non condensing

## DIMENSIONS

• 85mm (H) x 225mm (W) x 322mm (L)

• The unit may be mounted horizontally or vertically using the supplied brackets

#### **SUPPLIED ACCESSORIES**

- CDROM containing support apps and manuals
- Mounting brackets
- Power supply
- Serial cable

## WEIGHT

1.9kg

#### **PSU**

- Input Voltage I I OVAC to 230VAC 50/60Hz
- Output Voltage +5, +12, -12 VDC

# COLOUR - CASE

Silver – Pantone 877

Note<sup>1</sup> Please contact customer services for availability of these features

Note<sup>2</sup> BS-8418 is the UK code of practice for detector activated CCTV systems reporting alarms to remote video receiving centres.

# PLEASE CHECK THE WEBSITE FOR LATEST DEVELOPMENTS

FOR FURTHER INFORMATION PLEASE CONTACT

The manufacturer reserves the right to change the specification without

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