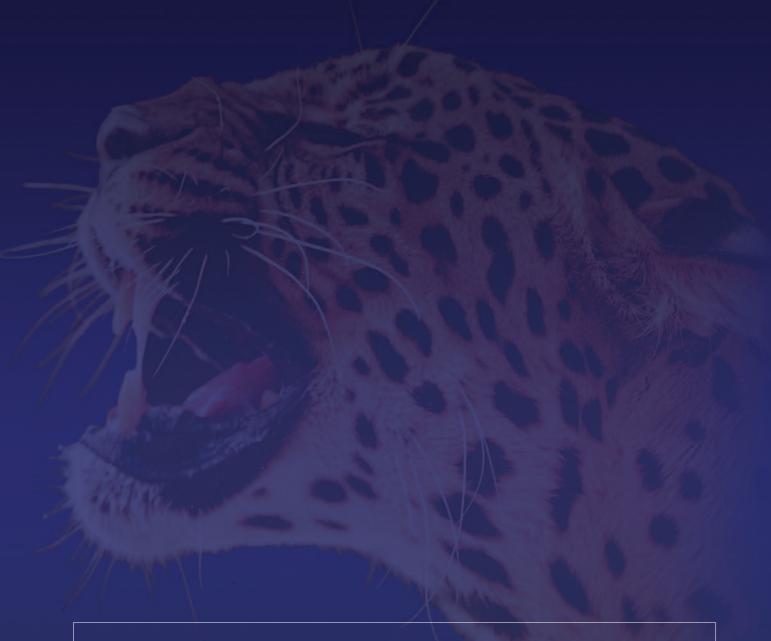


AMERICAN VIDEO EQUIPMENT





FIRST CLASS ENGINEERING AND TECHNICAL SUPPORT

AVE has earned a reputation as 'The Professional's Choice for CCTV' by delivering high value systems at competitive prices. We enable our customers to grow their businesses and to offer generous discounting, with the assurance of high quality products.

FAST DELIVERY

We offer you a comprehensive range of cutting-edge CCTV products for solo sites, up to major multiple installations, to achieve full system integration, working closely with other leading manufacturers on your behalf, to deliver bespoke solutions

ORDERING AND DISPATCH

Ordering couldn't be easier - by phone, fax, e-mail or via the internet - and our customer service team are always available should you need technical or general assistance.

WHY CHOOSE AVE?

AVE is a leading supplier of CCTV systems for security applications, protecting people and property in the public, commercial and private sectors for over 20 years.

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VSI-ProMAX

- REGCOM / HYDRA BUILT IN
- ALL AVE INTERFACES IN ONE UNIT
- FULL REMOTE PC OR DVR PROGRAMMING
- NEW VIDEO PROCESSING CIRCUITRY
- DVR TIME / DATE SYNCING TO POS



POS / Cash Register Interfacing

An additional serial port has been added to allow the VSI-Pro Max register port to have bi-directional communication with any till, emulating common printers, pole displays or customer displays. This additional port can then send the data to the Hydra / Regcom Network or send RS-232 or RS-485 directly to a serial port on the DVR.

Optically isolated RS-232 input selectable has been added to break the ground loop between the POS/Cash Register and video system. This completely seperates the POS / Cash register system from the video system eliminating till or communication problems or video noise.

Networking

With the built in Hydra, Regcom, Networker or Vnetworker functions, the VSI-Pro Max can be a complete POS / Cash Register interface plus be configured as a Master (Hydra) and/or Slave (Regcom) device for up to 16 tills. Therefore eliminating the use of the stand alone Hydra, Regcom, Networker or Vnetworker units. Just loop the RS-485 network from one VSI-Pro Max to the next. All VSI-Pro Max will then be configured as Regcom and the last in the loop will be configured as a Hydra and connect to the DVR. Diagnostic LEDs indicate the network active and data from the till is being received to confirm installation wiring.

The VSI-Pro Max is compatible with many 3rd party DVR protocol for translating the received data from POS / Cash Registers to the DVR propreitary protocol. Programmability for backward compatibility for all AVE network configurations for Hydra/Regcom, Networker and Vnetworker.

Supports Time / Date syncing of the DVR T/D to the POS Time and Date for compatible DVRs.

Video

Video AGC circuitry has been added to compensate for the new low light WDR cameras and UTP twisted pair adapters that reduce the video level below the standard 1V P-P. Therefore the VSI-Pro Max will deliver a constant video level to the DVR in all conditions maintaining stable text display. Video Surge Suppression has been added along with an isolated earth plug to prevent lightning surges as well.

Processor

With the new 40 Mhz processing speed all the above functions are possible. With the increased 128K SRAM high speed buffering and processing is possible with large data packet processing tills. With the increased flash program memory of 128K, all AVE POS, Cash Register, printer, pole displays, customer displays, Scales, Money Counters, radars, GPS and all drivers developed by AVE are in one convenient unit.

Software

The VSI-Pro Max supports PC programming and firmware updating. It is also compatible with the Vnetworker protocol so can be programmed and configured remotely with a compatible DVR.

Power

The VSI-Pro Max as all VSIs uses standard unregulated 12VDC. Full surge suppression on this power line prevents interference of common power supplies from effecting the interface, till or video system.

Mechanical

The VSI-Pro Max is housed in an electroplated metal enclosure with powder coated paint for compliance with all RoHS, CE and FCC standards.





THE NEXT GENERATION IS HERE

Compatible with over 400 POS / Cash Registers

THE VSI-Pro **Max** IS THE LATEST EVOLUTION OF THE MARKET LEADING POS/CASH REGISTER INTERFACE FROM AVE

Networking Built In - allows for combining the Networking functions of the Hydra, Regcom, Networker or Vnetworker within one convenient unit with looping RJ45s for a seemless solution for multiple till configuration.

Fast 40 Mhz Operation and Larger Memory

- can hold ALL the AVE Interfaces in one unit and new high speed printing spoolers and full device emulation.

Full remote PC or DVR programming

- for selection, setups & onsite firmware updating

New video processing circuitry

- allows use with new WDR cameras and low video of commonly used UTP adapters.

Built in RS-232, RS-485, Passive and new Opto-Isolated selection

- gives complete isolation from the POS/Cash Register from the video system.

POS / CASH REGISTER FRAUD DETECTION

- REDUCE PILFERING FROM CASH REGISTERS
- REDUCE SUSPICIOUS TRANSACTIONS SUCH AS 'VOIDS' & 'NO SALES'
- IDENTIFY ROGUE MEMBERS OF STAFF

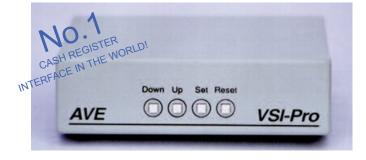
THE VSI-Pro SAVES YOU MONEY BY KEEPING IT IN THE TILL!



The picture below shows, without a doubt, that not all items passed over the counter were entered into the cash register.

HOW WOULD YOU KNOW WITHOUT THE VSI-PRO





The VSI-Pro is a Video to Serial Interface. It overlays serial data to a video signal, typically from a cash register, but can be used for many other devices such as weigh bridges, speed cameras, cash counting devices, etc.

The VSI-Pro translates data from transactions at the cash register and overlays this information as text onto the video images from the CCTV system. This information is permanently embedded onto the images, and therefore cannot be tampered with. The combination of cash register data and CCTV images makes it easy to identify suspicious transactions such as the one on the left.

A quick review of the footage shows that this kind of transaction is easily discovered. Without the VSI-Pro this transaction would have gone undetected as neither a review of the CCTV footage or the till receipts alone would anyone have identified this.

In addition the VSI-Pro not only captures this information, but allows the user to set up alarms on specific transactions, products, or members of staff. These are then fully searchable and depending on the set-up, can be reviewed at the touch of a button without viewing hours of surveillance.

PROVEN TO DRAMATICALLY
REDUCE THEFT AT THE
POINT OF SALE

COMPATIBLE WITH OVER **400** CASH REGISTERS

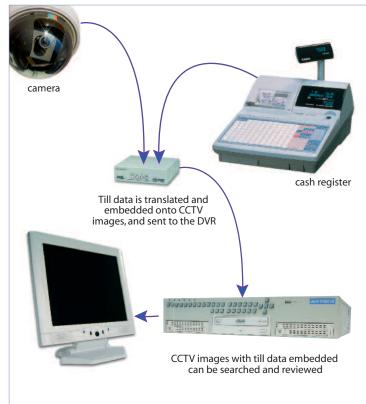
with two versions, adapters, converters or ECR Cards











FEATURES

- Hardware data overlay (the data is added to the video image and cannot be removed)
- Built in support for over 400 different cash register and other devices
- Exception Processor of suspect transactions such as 'Voids', 'No sales', 'Returns', and 'Sweet-Hearting'.
- Built in history memory of exception transactions which supports direct remote search of many DVRs
- Two built in programmable hardware alarms control of external devices and one input hardware alarm
- Works with any recording device
- Real time data Filtering and Export to external devices such as a DVR via RS-232
- Networkable via AVE Network Adpaters

HOW DOES IT WORK?

Video images from the CCTV system go into the VSI-Pro. The camera selected typically watches the general cash register area including the register, counter, employee and customer.

Transaction data from the cash register also goes into the VSI-Pro where it is filtered and translated into viewable 'receipt' type text.

The VSI-Pro then overlays this information onto the CCTV images and embeds it permanently so that it cannot be tampered with. These combined images and data are sent to the recorder for storage.

Images stored on the recorder can then be analysed using search criteria such as Staff Member, Alarms, Exceptions, Voids, or any other parameters set up by the user.

This is a basic system but multi-cash register systems can also be accommodated with the use of the AVE CashTrack DVR and AVE Networker which can handle numerous cash registers at the same time.

The VSI-Pro is compatible with over 400 different cash registers and Electronic Point of Sale devices, including all the top manufacturers.



- Set-up done by simple on-screen menus or PC Programming Software or compatible DVR with RegCom or Vnetwork adapter
- Easy set up (60% of set ups are plug and play)
- Largest range of supported devices of any POS/Cash Register interface
- Ongoing development for new devices and features
- Bespoke development for (registers/devices) or features not currently available.
- Large dealer network

CASHTRACK POS / TILL FRAUD DETECTION

- ELIMINATES THE NEED FOR EMBEDDED TRANSACTION DATA IN THE VIDEO IMAGE
- LOCALLY OR REMOTELY SEARCH FOR ANY TRANSACTIONS DATA, AMOUNT, T/D OR COMBINATION
- TIME & DATE SYNCING FROM POS TO DVR FOR CONSISTENCY
- REMOTE INTERFACE PROGRAMMING FROM THE DVR PANEL

CASHTRACK - COMPATIBLE WITH **OVER 400 CASH REGISTERS**

CashTrack from AVE is a DVR with in-built POS Text overlay and search software. When used with the VSI-Pro Max, VSI-Pro, or adapters, the CashTrack system overlays the transaction data onto a CCTV image and stores the raw data on the DVR HDD. The data normally comes from a POS/Cash Regsiter but can also come from any RS-232 source like scales, money counters, etc.

The data overlaid is permanently embedded into the DVR HDD as a data file, and therefore cannot be tampered with. The combination of cash register Data and CCTV images makes it easy to identify suspicious transactions.

REVIEW RECORDED TILL IMAGES AND CAPTURED DATA FROM ANYWHRE IN THE WORLD!



MVDR5000

HOW DOES IT WORK

SUITABLE APPLICATIONS:

- Cash registers (over400 models)
- ATM cash points
- Weigh bridges
- Cash Counters

Video images from the CCTV system goes either directly to the DVR or through the VSI-Pro. The camera selected typically watches the general cash register area, including the register, counter, employee and customer.

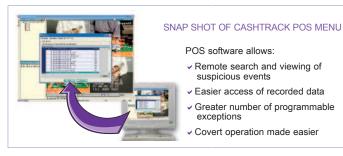
Transaction data from the cash register goes to the VSI-Pro or adapter, where it is filtered and translated into viewable 'receipt' type text.

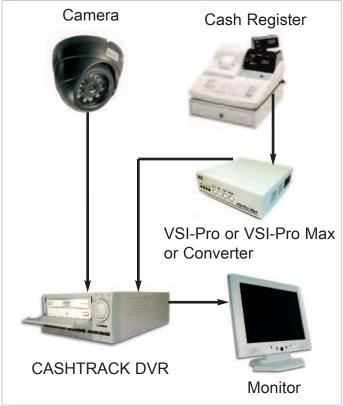
The transaction data is then sent to the DVR where it embeds it permanently on the HDD, so it cannot be tampered. This data can also be exported to use with other software for accounting or post processing.

Transaction text insertion can be enabled live or on playback but is not recorded in the video image as overlay to give a full view of the camera unobstructed.

Images stored on the DVR can then be analysed and searched by user, alarms exceptions, voids, numeric value or any other parameters set up by the user.

This is a basic system, but multi-cash register systems can also be accommodated with the use of an AVE CashTrack DVR and AVE Network which can handle up to 16 cash registers at the same time.













AVE FRAUD DETECTION EQUIPMENT

To combat theft at the 'point-of-sale' AVE has several "Text Over Video Inserters", "Adapters" and "Converter" products to review transaction details from the POS or Cash Register onto the CCTV image and send the transaction data to the DVR for database storage, 'Exception' processing and data search and retrival.

All Interfaces are fully programmable locally or remotely via our PC Programming software. In cases where the video overlay is done by the DVR like in the AVE Cashtrack then the RegCom Pro or a Converter to send the data directly to the DVR.

Adapters convert from the various types of POS peripheral connections and protocols to the VSI-Pro standard RS-232.

Due to the various configurations and location of equipment, AVE have come up with a Network solution to suit every application. Some simple systems will need a RegCom, Hydra, Networker, or Vnetworker, depending on what the user wants to achieve.

Our full range of Electronic Point Of Sale (EPOS) Fraud Detection Equipment may be confusing to some so please feel free to consult with an AVE engineer. We will endeavour to advise a cost effective solution for your Fraud detection needs.

INTERFACES

VSI-Pro Max POS/Cash Register Interface



The VSI-Pro Max can be used in simple or multiple cash register systems without any addition networking devices.

VSI-Pro VIDEO SERIAL INTERFACE



The VSI-PRO can be used in simple or multiple cash register systems.

VSI-Pro Dual



The VSI-Pro Dual is simply two VSI-Pros in one conenient enclosure with a single power point.

REGCOM Pro VideoLess POS/Cash Register Interface



The RegCom Pro has all the features of the VSI-Pro Max but without any video overlay or on-screen programming.

VSIB Language Converter



The VSIB works in conjunction with the VSÍ-Pro to display Korean, Chinese or Thai languages.

CONVERTERS

USB to RS-232 Converter



USB to RS-232 Converter converts a POS USB port to RS-232 or RS-485. Supports RTS/CTS handshaking so can AVE RS-485 support Network directly. Driver installation required in the POS or PC.

P2RS PARALLEL TO SERIAL Converter



Converts high speed parallel data to serial data and sends the data out through the RS-232 port to the VSI-Pro or VSI-Pro Max or Cashtrack DVR.

TCPIP232 TCP/IP TO RS232 Converter



protocol **Provides** conversion from any POS with Ethernet TCP/IP LAN to RS-232 or RS-485 for the use with the VSI-Pro, VSI-Pro Max or Cashtrack DVR.

ECR Cards

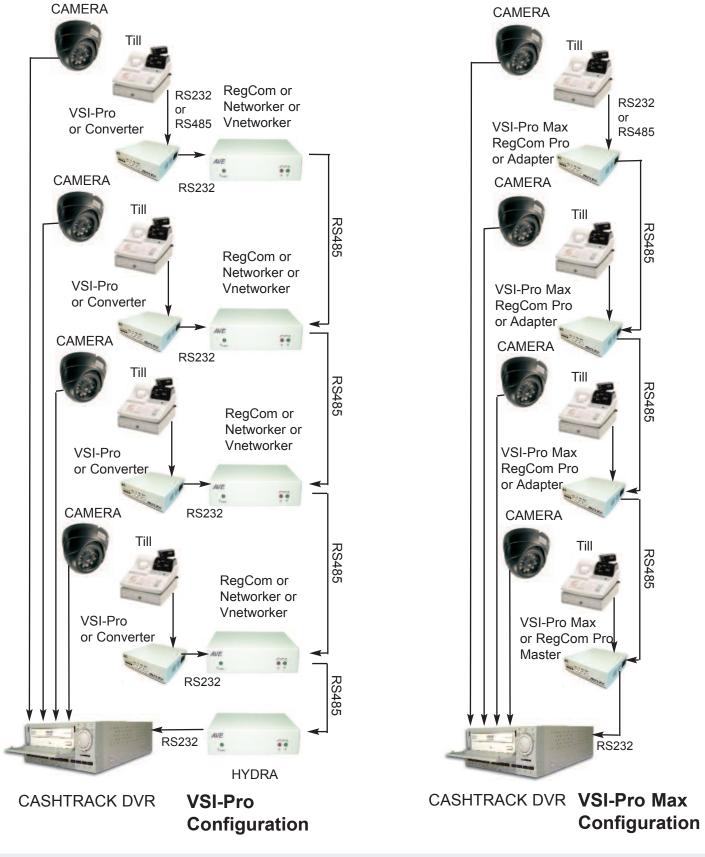


ECR Cards internally to ECRs and low end tills and convert the internal printer data to RS-232 to send to the VSI-Pro or VSI-Pro Max or Cashtrack DVR.

10

POS FRAUD DETECTION NETWORKING

- NETWORK UP TO 16 REGISTERS ON ONE RS-485 LOOP
- DVR REQUIRES ONLY ONE RS-232 PORT SUPPORTING VSI-ADD PROTOCOL
- SUPPORTS REMOTE DEVICE PROGRAMMING











The AVE CashTrack can be expanded up to 16 POS/Cash Registers utilizing the AVE RS-485 Network Adapters. The Slave Adpaters convert interface data to the AVE Network protocol while the Master Adapters decode the data and deliver to the DVR via one RS-232 port using the AVE VSI-ADD protocol. This protocol is open for all DVR manufacturers to implement within their DVR to allow full compatibility with the entire AVE POS / ATM line of interfaces.

All older and current versions of the VSI or VSSI can be used for Networking with the appropriate adapters.

The new VSI-Pro Max has full Networking capability built in and can be configured not only as a full emulating POS / Cash Register Interface but can be simultaneously configured as a slave and/or a master. Using the VSI-Pro Max or the VSI-Pro & Vnetworker Adapter, full remote programming of all setups of the interface via the front panel controls of the DVR are possible or via the AVE PC Software. This eliminates the onscreen programming requirement of the POS/Cash Register interface.

Master or Slave Interfaces

VSI-Pro Max POS/Cash Register Interface



The VSI-Pro Max can be used in simple or multiple cash register systems without any addition networking devices. PC or DVR Programmable.

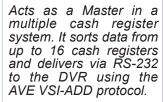
REGCOM Pro VideoLess POS/Cash Register Interface



The RegCom Pro has all the features of the VSI-Pro Max but without any video overlay or onscreen programming. PC Programmable.

Adapter Masters

HYDRA Network Master To RS232 Adapter



HYDRA TCPIP

Network Master to TCP/IP Adapter



Acts as a Master in a multiple cash register system and delivers all the POS data via the TCP/IP Ethernet LAN using the basic VSI-ADD protocol.

Adapter Slaves

REGCOM Adapter



Acts as a Network adapter in multiple cash register systems and connects directly to some POS/Tills, ECR cards, adapters, or the VSI-Pro via RS-232.

Adapter Slaves





Converts high speed parallel data to Network data in multiple cash register systems. Must specify either DB25 or Centronics type tap or emulate cable.

REGCOM TCPIP TCP/IP To Network Adapter



Acts as a Network adapter in multiple cash register systems and connects directly to a LAN TCPIP to extract register data for a particular POS.

NETWORKER Adapter



Acts as a Network adapter in multiple cash register systems. Used in conjunction with the VSI-Pro or VSSI-Pro only.

VNETWORKER Adapter



Acts as a Network adapter in multiple cash register systems. Used in conjunction with the VSI-Pro and allows remote PC or DVR programming of the VSI-Pro.

ATM FRAUD DETECTION

- REDUCE FRAUDULENT USE OF ATM
- REDUCE THREAT OF POSSIBLE ATTACK AT ATM
- IDENTIFY THOSE INVOLVED IN ILLEGAL ACTIVITY AT ATM
- WILL IDENTIFY EXCEPTIONS DEFINED
- EASILY REVIEW ATM USE, USERS, AND MISUSE





ATM MONITORING

ATM TEXT INTERFACE SUPPORTING BANK ATM NETWORKS



Automatic Teller Machines (ATM) are a high security risk. They are at risk from Tampering, Vandalism, Theft and Personal Attack of users.

The AVE VSSI-PRO for ATMs taps the modem communication to the ATM or connects to the external camera controller port on the ATM. The interface monitors the data stream from the ATM, and inserts printer or display data from the receipt onto the video picture.

An additional Serial port exports all the transaction data to the CashTrack or other compatible DVR for database logging of all transactions and thus later remote search.

THE VSSI-PRO AND HANDLES SDLC, SNA, ASYNC, AND BISYNC IBM 3670/75 FORMATS DIRECTLY AND IN CONJUNCTION WITH THE TCPIP232 ADAPTER WORKS FOR ALL ATM HOSTS.



Typical VSSI-Pro Transaction Data Overlay

VSSI - PRO

ATM Text Interface

VSSI-Pro FEATURES

- Time / Date on-screen, On/Off Time/Date, Genlock to Host
- Time / Date stamp on up to 24 Exception Outputs
- 32K Battery backed SRAM Improved buffer (exception buffering, downloading / and printing)
- Auto Poll Select Address Setup
- Auto Network Configure SDLC or BisyncDVR or Printer Serial output
- Programmable Alarm Output
- Card Reader or Alarm Contact Input
- Programmable triggered text provides for serial output for the control of DVR, PTZ or other
- 24 exceptions: Remove unwanted data from screen, Alarm certain types of transactions, Send certain transactions to prnter or internal history buffer
- CashTrack Networking via the Networker Converter

TCPIP232 Adapter TCP/IP TO RS232 CONVERTER



Provides protocol conversion from any Ethernet TCP/IP ATM to RS-232 for the use with the VSSI-Pro, VSI-Pro Max, VSI-Pro or stand alone to deliver data directly to the Cashtrack DVR. Networks directly via RegCom protocol for multiple ATM installations in one DVR. On-Screen programming when used with the VSSI-Pro or VSI-Pro. In stand alone mode, PC programming must be used.



ATM FRAUD DETECTION

- MONITORS ATM TRANSACTION DATA
- PRODUCES A SEARCHABLE DATABASE OF EXCEPTIONS
- NETWORKABLE IMAGES CAN BE REVIEWED BY PC, & WITH
- INTERNET CONNECTION, FROM ANYWHERE IN THE WORLD
- IMPROVES CUSTOMER SERVICE WITH QUICK RETRIEVAL



CASHTRACK - COMPATIBLE WITH ALL ATMS WORLDWIDE

CashTrack from AVE is a DVR with in-built transaction database and search software. When used with the VSSI-Pro or TCPIP232 Adapter, the CashTrack system overlays the transaction information onto a CCTV image and stores all the data to the DVR database.

The data overlaid can be permanently embedded onto the images, and therefore cannot be tampered with. The combination of ATM Transaction Data and CCTV images makes it easy to identify suspicious transactions for fraud or customer service purposes.

REVIEW RECORDED ATM IMAGES AND TRANSACTION DATA FROM ANYWHRE IN THE WORLD!



MVDR3000

HOW DOES IT WORK

SUITABLE APPLICATIONS:

- ATMs Cash Points
- Teller or EFT Terminals
- Cash Counters

Video images from the CCTV system goes into the VSSI-Pro or directly to the DVR. The camera is typically installed covertly within the ATM to capture the user facial image.

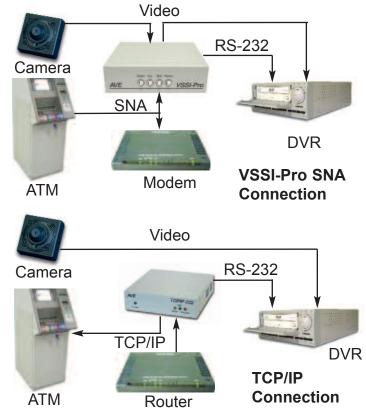
Transaction data from the ATM goes to the VSSI-Pro or TCPIP232 Adapter, where it is filtered and translated into viewable 'receipt' type text and sent to the DVR.

The VSSI-Pro or DVR then overlays the transaction data onto the CCTV images and embeds it permanently, so it cannot be tampered.

These new images are sent to the recorder for storage along with the raw transaction data stored independently in the DVR database for later retrieval.

Images stored on the Recorder can then be analysed and searched by Time/Date, Transaction Number, Card Number, ATM location, ATM Number or any other data incorporated in the receipt of the ATM transaction. Exceptions can be programmed to flag the security officer such as large withdrawals or stolen cards or erase unwanted screen data.





DIGITAL RECORDERS

As one of the world's leading suppliers of CCTV, AVE have a large selection of Digital Recorders to suit any application. Whether you require a single channel DVR - perhaps if you are looking to upgrade an existing VCR based system, or whether you require a top of the range 16 channel DVR for larger installations, AVE has the solution.

1 CHANNEL

- SINGLE CHANNEL
- TRIPLEX DVR
- REMOVABLE DRIVE
- SD CARD
- LAN
- RS-232 & RS-485
- 12 VDC

SPECIFICATIONS

No. of Channels

Max HDD Capacity

Removable Hard Drive

Images per second:

Network Ready

PTZ / POS / ATM RS485

Audio Inputs

Audio Outputs

Compression:

Remote Control / POS / ATM RS-232

CashTrack Software

Archiving:



MV-DR3000

1

1

50/60 MJPEG 25/30 MPEG4

1TB X2

Yes

.,

Yes

Yes

1

1

MJPEG or MPEG4

Yes

Yes

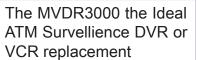
SD Card

CD / DVD-RW (Optional)

FEATURES

- Non PC based stable digital recorder with major digital advantages including:
 - Pre-Alarm recording capability
 - Network capability
- CashTrack text insertion for POS & ATM Interfacing and Transaction Search
- Time Syncing to VSI-Pro Max
- Redundant HDD recording for alarms
- Supports remote VSI-Pro Max Programming
- Multiple search modes including:
 - Filter (thumbnail) list search
 - Time search
 - Any Transaction Data search
 - Alarm search
 - Event search
- Multiple recording modes including:
 - Schedule recording

- Pre and post-alarm recording
- Manual recording
- Circular recording
 Playback Speeds:
- Frame stepping,
- 1/16X, 1/8X, 1/4X, 1/2X ,
- 1X, 2X, 4X, 8X, 16X, 30X, 100X
- Network capabilities:
 - View live or recorded images,
 - Remote system adjustment,
 - Ethernet (10/100 Base-T),
 - TCP/IP, DHCP, HTTP, SMTP
- Operation status record logPower interrupt recovery
- User friendly Jog / Shuttle operation
- Motion Detection
- Capable of working with most existing multiplexers

















4 CHANNEL

- 4 CHANNEL
- TRIPLEX DVR
- CD-RW DRIVE.
- SD CARD
- LAN
- RS-232 & RS-485
- 12 VDC



SPECIFICATIONS MV-DR5000 No. of Channels 4 Max HDD Capacity 1TB X2 Removable Hard Drive (Optional) Images per second: 50/60 MJPEG 25/30 MPEG4 Network Ready Yes PTZ / POS / ATM RS-485 Yes Audio Inputs 1 **Audio Outputs** Compression: MJPEG or MPEG4 Remote Control / POS / ATM RS-232 Yes CashTrack Software Yes (MJPEG Only) Archiving: CD-RW / SD Card

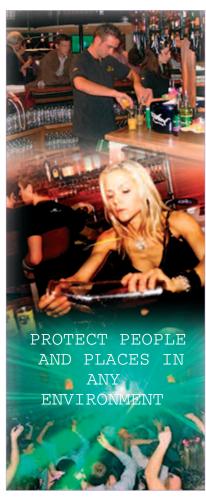
FEATURES

- Non PC based stable digital recorder with major digital advantages including:
 - Pre-Alarm recording capability
 - Network capability
- CashTrack text insertion for POS & ATM Interfacing and Transaction Search
- Time Syncing to VSI-Pro Max
- Redundant HDD recording for alarms
- Supports remote VSI-Pro Max Programming
- Multiple search modes including:
 - Filter (thumbnail) list search
 - Time search
 - SD Card search
 - Alarm search
 - Event search
- Multiple recording modes including:
 - Schedule recording
 - Pre and post-alarm recording

- - Manual recording
 - Circular recordingPlayback Speeds:
 - Frame stepping,
 - 1/16X, 1/8X, 1/4X, 1/2X,
 - 1X, 2X, 4X, 8X, 16X, 30X, 100X
 - Network capabilities:
 - View live or recorded images,
 - Remote system adjustment,
 - Ethernet (10/100 Base-T),
 - TCP/IP, DHCP, HTTP, SMTP
 - Water marking with digital signature (DR5000)
 - Operation status record log
 - Power interrupt recovery
 - User friendly Jog / Shuttle operation
 - Motion Detection
 - Capable of working with most existing multiplexers

The MVDR5000 is the perfect solution for any Convenient Store, Gas Station, Food Court, Bar or Pub to fully integrate with the POS terminal or Cash Register to reduce shrinkage and cashier theft at the Point of Sale.





DIGITAL RECORDERS

As one of the world's leading suppliers of CCTV, AVE have a large selection of Digital Recorders to suit any application. Whether you require a single channel DVR - perhaps if you are looking to upgrade an existing VCR based system, or whether you require a top of the range 16 channel DVR for larger installations, AVE has the solution.

TITAN MV-DR8T

- MV-DR8T-250GB
- ■MV-DR8T-300GB
- ■MV-DR8T-500GB
- ■MV-DR8T-600GB
- MV-DR8T-800GB
- MV-DR8T-1Tb
- MV-DR8T-1.5Tb

TITAN MV-DR16T

- MV-DR16T-250GB
- MV-DR16T-300GB
- MV-DR16T-500GB
- MV-DR16T-600GB
- MV-DR16T-800GB
- MV-DR16T-1Tb
- MV-DR16T-1.5Tb

8/16 CHANNEL

- 8/16 CHANNEL
- TRIPLEX DVR
- TWO HARD DISK DRIVES
- ARCHIVE TO DVD
- ARCHIVE TO USB PORT
- NETWORK READY



SPECIFICATIONS	MV-DRT-8/16
No. of Channels	8 OR 16
Max HDD Capacity	1.5TB
Removable Hard Drive	2
Images per second:	100ips
Network Ready	Yes
Dial up facility	Yes
Audio Inputs	1
Audio Outputs	1
Compression:	MPEG4
Remote Keyboard:	Yes
POS Software	No
Archiving:	Built in DVD-RW, USB 2 Port

FEATURES

- 8/16 Channel Triplex DVR
- LAN ready
- Compression: MPEG4 (5-10X smaller than MJPEG)
- Maximum 1.5TB HD (2 Removable HDD's)
- Recording Rate: 100pps
- 2 channels, in and out, for audio recording
- Built in CD-RW & USB Port for Archiving
- Exports as DRV file and playback softwareis also copiedonto the HDD

- Automatic camera detection (Plug & Play)
- Digital zoom 2x2 in live & exported video
- Covert camera operation provides enhanced security & administer control.
- EzBurn & ezRecord technology allows for easy download and export of recorded video setup
- Pre-Alarm recording up to 30 seconds
- Search by event, Time, Text String, Amount of transaction, and motion
- PTZ control on front panel
- Option for SVGA Output, to accept a PC Monitor









8/16 CHANNEL

- 16 CHANNEL
- TRIPLEX DVR
- 4 REMOVABLE HDDS
- ARCHIVE TO DVD-RW
- ARCHIVE TO USB PORT
- LAN
- POS SOFTWARE
- 200 ips / 400 ips (optional)
- 16 Audio Inputs (optional)
- Remote Keyboard (optional)



SPECIFICATIO	NS
No. of Channels	

MV-DR16-X

Max HDD Capacity

16 3Tb (+3Tb of Raid)

Max External HDD capacity

3Tb

Removable Hard Drive Images per second:

4 200ips or 400ips upgrade

Network Ready

Yes

Dial up facility

Yes

Audio Inputs

2 (or 16 with audio hub)

Audio Outputs

Compression:

MPEG4 / MJPEG

Remote Keyboard:

Yes

POS Software Archiving:

Built in DVD-RW USB Po

FEATURES

- 16 Channel Triplex DVR
- LAN ready
- Compression: MPEG4 / MJPEG (5-10X smaller than MJPEG)
- Maximum 3TB Internal Storage
- 4 Removable Hard drives
- Recording Rate: 200ips, upgrade to 400ips
- 2 channels, in and out, for audio recording
- Built in DVD-RW & USB Port for Archiving
- Automatic camera detection (Plug & Play)
- Digital zoom 2x2 in live & exported video
- Covert camera operation

- ezBurn & ezRecord technology allows for easy download and export of recorded video setup
- Pre-Alarm recording up to 30 seconds
- Search by event, Time, Text String, Amount of transaction, and motion
- PTZ control on front panel
- Option for SVGA Output, to accept a PC Monitor
- Exports AVI files (viewable via Microsoft Media Player on any PC with DivX installed)
- EPOS software installed, when used with the VSI-Pro, produces a searchable database of transactions.

XCALIBUR MV-DR16X

- MV-DR16X-500GB
- MV-DR16X-750GB
- MV-DR16X-800GB
- MV-DR16X-1TB
- MV-DR16X-1.5TB
- MV-DR16X-2TB
- MV-DR16X-2.5TB

XCALIBUR MV-DR16XU (400ips UPGRADE)

- MV-DR16XU-500GB
- MV-DR16XU-800GB
- MV-DR16XU-1TB
- MV-DR16XU-1.5TB
- MV-DR16XU-2TB
- MV-DR16XU-2.5TB

CCTV Products & Accessories



USE THE I-CHECKED UNIT TO RECORD CUSTOMERS I.D'S AT CHECKOUTS WHERE THE SALE OF ALCOHOL, CIGARETTES OR CONTROLLED SUBSTANCES IS NECESSARY.

The I-CHECKED system records a customer's I.D. on your CCTV System, helping to insure that your employees are fulfiling their responsibility in checking a customer's date of birth and lowers your exposure to a potential liability in not determining proper identification.

- Use to record I.D.'s at checkouts where the sale of alcohol, cigarettes or controlled substances is necessary
- Works with most camera systems, recorders: Drivers License, I.D.'s, Credit Card, Debit Cards, Etc.
- System Includes: 1/3" colour CCD Imaging Camera 420 TVL
- 12Vdc Power Supply; Power Draw: 500ma Max
- Adjustable Record time can be adjusted from "instantaneous" through 21 sec's.
- Card In Alarm Output 12VDC Active High
- Dimensions: 3"W x 3.5"H x 9"L
- Weight: 2.1lbs.
- Video Input: 1 V P-P 75 Ohm. Terminated
- Video Output: 1 V P-P 75 Ohm. Terminated

PIPc COLOR PICTURE IN PICTURE



This state-of-the-art color picture in picture device automatically inserts one camera picture into another on one screen. Swapping the pictures full screen or turning the inset on or off manully via front panel buttons or initiated by an alarm inputs.

- Two selectable inset picture sizes:1/9th and 1/16th positioned anywhere on screen using front panel buttons.
- Battery back up NiMh 90 days after charge.
- Border colours: Black, Green, White, Blue,
 Red, or off
- Built in Demo Mode
- 12 VDC Operation
- NTSC Only

VECA

Video Enchancer Compensating Amplifier



The VECA is an active inline transmission device mounted on the camera to compensate for video degradation due to long BNC cables. There are two controls on the VECA, one for Enhancing Color and the other for Gain. Operates on 12VDC.

VIDEO SWITCHER



Allows sequential viewing of between 2, 4 or 8 camera inputs in compact enclosures. Using the DS-20-OF Rack and 4PSWT-PCB Cards up to 64x1 Video Switcher configurations can be realized.

2PSWT (2 4PSWT (4

(2 Camera Switcher)

4PSWT-RS 8PSWT (4 Camera Switcher, RS232)

8PSWT (8 Camera Switcher)

8PSWT-RS (8 Camera Switcher, RS232)

VDA-401 Video Distribution Amplifier

The VDA401 is a high quality 1-input looping to 4-output video/audio distribution amplifier. All outputs are short circuit protected and each can drive two 75 ohm terminated loads. 12 VDC operation.











Time & Date Titlers

TDCT-Pro TIME DATE TITLE Master/Slave Configurable



For the highest reliability and quality offered today in Date, Time and title Generator. Selections are set through interactive on-screen programming along with RS-232 commands. Accuracy to 1/50th PAL or 1/60th NTSC for individual field counting. 12 VDC

DTTDATE TIME TITLER



Mini Size and highest reliability and quality offered today in Date, Time and title Generator. Selections are set through interactive on-screen programming. Low power consumption for covert installations, character border programmable, 7.5 to 24 VAC / VDC Operation.

DTT-Pro DATE TIME TITLER



Mini Size and highest reliability and quality offered today in Date, Time and title Generator. Selections are set through interactive on-screen programming. Overlays on video source or generates its own composite video signal without a camera input. 12 VDC Operation.

CCESSORIES

AVE offer a wide range of DVR accessories. For more information on the products available or for assistance to meet your requirements, please contact a member of the AVE sales team.

OPTO232 RS-232 Opto Isolator for VSI-Pro



Connects directly to the VSI-Pro and optically isolates POS / Cash Register data inputs without any additional power source.

RS-232 to RS-422/485 Converter



Converts RS-232 signals to either RS-485 or RS-422 and vice versa. Increases length of cable when using RS-232 port of any POS, VSI, or DVR from max 100 ft to 3000 ft. Supports RTS/CTS flow control for RS-485.

AL-16 RS-232 to 16 Relay Outputs



The AL-16 accepts commands via RS-232 or RS-485 and controls the respective Form C Relay closure. NO & NC & Common screw terminal connections for each output. 12VDC

PreMade Cable Adapter



Use standard premade power cables with DC Coax connectors and connect via one power supply. Independent automatic resetable fuses per camera with individual power LEDs and power switch. Removeable fuse for main power.

Cables / Connectors



Cables for POS / Cash Registers / ATM connections along with Programming and custom connections.

AL-16 I/O 16 Relay Outputs and 16 Opto Isolated Inputs



The AL-16 I/O accepts commands via RS-232 or RS-485 and controls the respective Form C Relay with NO, NC & Common. Opto-Isolated Inputs are read and transmitted per alam polled. Screw terminal connections for each Input and Output. 12/VDC Operation.

DS-20-OF 19" Racks for PCB Level Products

Available for VSI-Pro Ver. 12/13, VSI-Pro Max, VDA-401, RegCom, Hydra, DTT, DTT-Pro, TDCT-Pro, VMD1001 and VMD1004. Common 12VDC power screw terminal connector.



VSI-Pro



VDA-401

Police Video Systems

AVE offers the complete line of Prosecutor in car camera systems for Law Enforcement www.policevideo.com



The Prosecutor Police Video System is a complete solution for law enforcement agencies. The Prosecutor Digital shown includes several choices of Control Heads, Wireless Body Microphones, Front Day/Night Auto Focus Zoom Cameras, Backseat or rear Color or B/W IR Cameras and many options for interfacing to Laser/Radar Speed Guns, Alcohol Meters, GPS, Card Readers, G-Force devices and Wireless 802.11 LAN. Included software for remote viewing and downloading along with removable HDD for fast PC based downloading. Powerful data search allows the user to search by Time/Date, Car Number, GPS or any Interface Data or any triggered record mode. The Prosecutor Digital is available in MPEG4 or MJPEG. The Prosecutor VCR includes a VHS Stereo VCR for traditional analog recording.

Live Remote Audio/Video Viewer



Live remote ability to view and hear all events in the vehicle and launch other functions

Remote Playback Event Selection



Remote playback screen for selection of recorded events by simplying clicking and playback.

Remote Backup and Review



Remote review and search of any recorded data and backup of either AVI video or JPEG snapshot files.









Integrated 4" LCD Control Head

Most popular overhead control unit contains backlite membrane buttons and a 4" High Resolution TFT LCD monitor. Stereo operation with independent volume, brightness and backlight controls. Visor mounts for most standard vehicles.



The PT control unit contains backlite membrane buttons and a 5.6" High Resolution TFT LCD monitor. The LCD monitor can be tilted down from its locked viewable position and panned up to 350 degrees in either direction allowing for driver or partner to improve Stereo operation viewina. independent volume, brightness and backlight controls.



Digital Vault



Locked Climate Controlled Vault



VCR Vault









Modular Control Head

The modular control head allows the user to specify and mount their own external LCD monitor.





Vault Interface

The vault interface allows the use of any standard CCTV camera and any audio source and speakers utilizing any Prosecutor Vault.





Mobile Video Equipment

Windshield Mount AutoFocus Zoom Camera



27X 1 Lux Day / 0.3 Lux Night 30X 0.5 Lux Day / 0.05 Lux Night

Direct Windshield mount bracket or standard 1/4-20 camera mounts available. Full control large rear panel buttons for Zoom Telephoto / Wide and Focus Near / Far and Menu Setup in addition to controls on the Prosecutor Control Head. Low Light sensitivity and high speed shutter allow to capture speeding vehicles with crystal clear images.

Color or B/W IR Backseat Camera



The Prosecutor Backseat cameras are designed to record in no light conditions with the built in IR illuminators and microphone to capture detainees in the police vehicle.

Weatherproof Monitor



Weatherproof 27X or 30X Day/Night Camera





Motorcycle Mounting

The Prosecutor Weatherproof Auto Focus Zoom Camera is designed to be mounted on motorcycles or outside on vehicles that are exposed to the elements. Interfaces to all Prosecutor Control Heads for full functional control.



All supported Hand Held speed guns plug directly to the Prosecutor in car system and can be fitted with any Prosecutor Camera. This allows the in car system to give double duty for patrol surveillance and speed detection.

The Prosecutor 4" LCD Weatherproof monitor can be used for a variety of outdoor applications for motorcyle or portable speed capture sets.









Portable Speed Gun Sets

Available for all popular Radar or Laser Speed Guns with a communications port

Portable DVR Camera Sets



This portable or tripod mounted set includes the Prosecutor Auto Focus Zoom Camera and 4" LCD monitor mounted to the speed gun. The DVR mounted in the electronics and battery box allows for remote operation with included charger.

Ticket Printing Software



The Prosecutor Ticket Printing Software in conjunction with the Prosecutor Digital MJPEG and supported speed gun produces the complete ticket with violators picture with speed superimposed on the image. Can be programmed for automatic over speed image recording and printing.

Removable DVR/Camera Sets



This portable or tripod mounted set includes the Prosecutor Auto Focus Zoom Camera with a Removable DVR/Camera mounted to the speed gun. The electronics and battery box allows for remote operation with included charger.

Integrated Portable Speed Sets



This Integrated Portable set includes the Prosecutor Day/Night Auto Focus Zoom Camera, 4" LCD monitor, DVR and electronics mounted in one convenient unit. Can be hand carried or Tripod mounted and plugs directly to any standard 12 VDC Outlet

TwistPlex Twisted Pair Transmission

The AVE UTP (Unshielded Twisted Pair) Transmitter / Reviever bring the ease of using structured CAT3/4/5/6 cab transmission and reception of video signals allowing you to take advantage of existing cabling aready installed in a buildi UTP cable instead of the more expensive coax cable. The unique design allows for single handed installation and c directly to the rear of a camera. The small size allows direct connection to the rear of the DVR since the same width as

PASSIVE UTP TRANSMITTER AVE-UTP-1500



AVE-UTP-1500

The AVE-UTP-1500 Passive Transmitter / Reciever:

A passive device which allows for the transmission of video, audio and Pan / Tilt & Zoom or other modulated embedded bi-directional control signals over Unshielded Twisted Pair (UTP).

This simple device needs no tools to install, just push and hold the locking buttons, insert the wire and release.

- Allows a signal to travel up to 2,500 ft / 800m in B&W, or 1,500ft / 460m in colour using Unshielded Twisted Pair Cable UTP (CAT5 for example).
- The signal can be Video images or PTZ control commands or both
- Take advantage of existing cabling that may be installed in a building, or run UTP cable instead of the more expensive and harder to manipulate coaxial cable.
- Easy to install

PASSIVE UTP HUBS AVE-UTP-4X1500 / 8X1500 / 16X1500 The They commodition in the commodin



AVE-UTP-4X1500. (4 Channel) AVE-UTP-8X1500. (8 Channel) AVE-UTP-16X1500 (16 Channel)



The AVE-UTP Passive Hubs

The AVE UTP Passive Hubs are available in 4, 8, or 16 channel. They allow the transmission of video, audio and Pan, Tilt and Zoom commands to be carried out over UTP cable, all in a neat wall mountable or table top metal enclosure.

- Used in multiple camera installations to simplify and neaten cable runs.
- Built-in push cage clamps for individual UTP connections or common RJ45 or CAT5 jacks which can accomadate 4 video cameras in one cable.
- 8 and 16 Camera units have Included Rack Mounting Wings for 19" racks.

REAR RACK MOUNT allows front facing connections





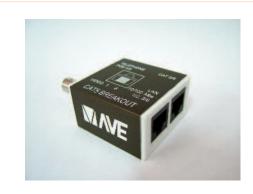
FRONT RACK MOUNT allows rear facing connections





CAT5 Breakout

The CAT5 Breakout allows the use of standard CAT5, 5e or 6 to have full 10/100mbs Ethernet LAN and also the addition of Video and Telephone or Power on the same cable. This is an ideal solution to home wiring for LAN, telephone, door phone or front door video. Connectors are RJ45 for CAT5/5e/6, RJ45 for LAN, RJ45 for Telephone or Power and BNC for video.



le for the ng, or run onnection the BNC.









TWISTED PAIR TECHNOLOGY MOUNTING OPTIONS - WALL MOUNTED

The unit can be unscrewed and easily opens up to access holes for secure wall mounting.

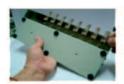
Once fixed to the wall the unique design enables the unit to slide onto the secured back plate and can be screwed into position.

The unit can be mounted in any orientation that suits the application.













ACTIVE RECEIVER ARXD

The ARXD Active Receiver is used in conjunction with the AVE UTP-1500 passive transmitter or VECA UTP when extended range and quality is required for a full color signal to 1Km or 3000 ft. with CAT 3,4,5,5e,6 UTP wire. Full surge suppression on both the power and video are standard. Lightning strike suppression on the video input when properly grounded with the isolated earth ground lug. Internal AGC (Automatic Gain Control) automatically compensates for varying line level changes over time due to lossy cables and connections so no user adjustments required. Color boost and recovery to regain those brilliant colors even in the worst environment. Low power 12 VDC operation. Video Error LED for low or video loss indication.



ACTIVE TRANSMITTER VECA UTP

The AVE VECA UTP is a precompensation device mounted at the camera end to enable the transmitted video signal to be boosted for longer cable runs. These advanced devices precompensate for lossy (loss of data through data degradation over large distances) and changing resistance of building wire. User adjustment for video gain and color enhancement. Has BNC input with UTP or BNC output. 12VDC Operation





VIDEO MOTION DETECTION

Digispec Advanced Outdoor Motion Detection system intelligently designed to detect movement within a specified area being monitored and initiate recording. Ideal for loading bays and warehouses where recording is required as and when deliveries are made, for instance. The Digispec is not bound to straight line detection (like most other technologies e.g. IR Beam Barriers used in PIR and Microwave Motion Detectors). www.digispec.us



DS-1PL

OUTDOOR DIGITAL VIDEO MOTION DETECTOR



- Single Camera Outdoor Video Motion Detector
- 8 Independent Zones with independent alarming outputs
- 262, 144 detection points per channel
- Tracking time: adjustable 0-8 second in 0.1 second increment
- Target Size and Sensitivity Selection
- Target Trace and Tracking Memory viewing modes
- Non-volatile EEPROM back-up memory
- Powerful and sophisticated, it's straight forward design allows for quick installation and set up.
- Can be configured to operate in 1 of 5 different modes: Motion detection, Motionless detection, Direction Detection, PTZ Modes and Museum Mode.
- Day/ Night modes can be switched by timer or external devices
- PC Programming and Operation by RS-232 or via Ethernet with the DS LAN adapter.



DS-16 19" RACK CHASSIS FOR UP TO 16 DS-1SPL MODULES



- Chassis holds up to 16 DS-1SPL Digital VMD modules
- Addressable for multiple-unit control, up to a total of 128 channels
- Front Panel Keypad Programming
- Rack mountable or desktop
- 100-240 VAC Power Input
- Looping inputs for each channel
- DB25 connectors for Alarming and Communication
- RS>232 input control or Ethernet with the DS LAN Adapter



MOTION DETECTION YOU CAN TRUST

Video Motion Detectors (VMD's) provide instant alarm verification by providing an alarm to security personnel and/or recording device, thus allowing for a quick and appropriate response.

VMD systems can drastically reduce installation costs as there'll be no need to install cabling over vast distances or use some type of wireless link when used in conjunction with existing CCTV systems.

A single camera can protect a large area and can be selective in its detection in that area. With the use of "masking" (selecting only a part or parts of the video scene that the VMD will protect, ignoring activity in the unmasked portions), the VMD ignores unprotected areas. The VMD can discriminate between multiple zones created on one camera view with independent target sizes and movement. The system can be extremely sensitive, down to a single pixel of video or coase to detect large vehicles, ships or airplanes.

ADVANTAGES

- Gives high performance outdoor video motion detection for any application where DVRs / Multiplexers leave off as they cannot handle true outdoor video motion detection
- Hazardous areas can be monitored remotely
- Target size, velocity and sensitivity programmable
- Target trace and tracking features
- Direction Sensing
- Change (mask) detection area dimensions (full or partial screen... multipoints)
- Multiple detection zones for one camera with separate alarm outputs for each
- Ability to accommodate for gradual illumination changes such as sunrises, sunsets and moving cloud cover
- Vibration detection and alarm suppression
- Ability to discriminate between wind, rain, snow, blowing leaves, small animals or birds and a true intrusion.
- Ethernet LAN module Adaptor available
- Provides timed alarm responses and computer communication to proprietary systems or large scale matrix switchers.
- Alarm Inputs to AND/OR with other motion detection technology to further reduce false alarms.
- Compatible with PTZ cameras
- DSVMD windows based software to program, control and status included free.





e range to be detected can be set using simple menu commands to a recording irrelevant events. (highlighted areas indicate detect



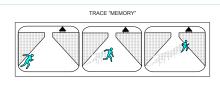








DS-1PL Trace / Tracking Modes



TRACE "MEMORY STROBE"



BLACKOUT "ON & TRACE ON



BLACKOUT "AUTO"



DS1-PL Relay Board



 The DS1-PL Relay board plugs directly to the rear DB-15 connector on the DS1-PL and breaks out the individual 8 zone alarms with separate Form C Relays for easy integration with additional equipment. DB9 for RS-232, Global Alarm, TTL Compatible outputs and easy to use push terminal connectors. 12VDC Operation

DS LAN



The DS LAN Converts either the DS1-PL or DS-16 to be fully programmable over Ethernet LAN. Connects to either device via the RS-232 port and up to 128 channels of VMD can be controlled or programmed via one IP Address. Compatible with the DSVMD Software.

MTI-16CD-VMD



16 Camera Indoor or Fixed Lighting Outdoor Video Motion Detector. Has a 1, 4, 9 or 16 split digital monitor output along with 2 additional call monitor outputs. Has Multiplexer input and output for recording with a VCR or DVR. 16 Hard Alarms input and one Form C relay output. Includes MTIUDL PC Programming software.

AL-16 - This device is required to give independent Form C Relay contacts outputs for each channel of Motion.





Optional Remote Keyboard connects via RS-232 or RS-485.



VMD-1001

SINGLE CHANNEL VIDEO MOTION DETECTOR



- Single Camera Video Motion Detector
- Reliable and cost effective
- Widely used to secure indoor or fixed lighting outdoors
- Compact size
- Low Voltage requirements
- Simple on-screen programming menus
- Excellent for covert applications
- 99 levels of sensitivity
- Duration settings from 0-99 seconds
- Tracking time: adjustable 0-8 second in 0.1 second increments

VMD-1004

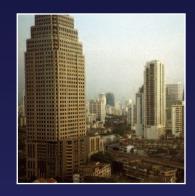
4 CAMERA VIDEO SWITCHER WITH MOTION DETECTION



- 4 camera video switcher that has VMD (Video Motion Detection) on each camera
- OSD (on-screen) programming for switching dwell time, bypassing and motion dwell time along with the VMD setups is done via the 4 front panel push buttons.
- 99 levels of sensitivity
- Independent motion dwell times for all 4 cameras 1-30sec
- 4 Red LEDs for signify which camera is currently outputting.



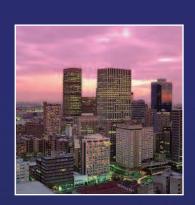
UNITED KINGDOM



THAILAND



IRELAND



SOUTH AFRICA

AVE Thailand Co.,LTD 147 Soi 44 On-Nut Sukhumvit 77, Suan Luang Bangkok, 10250, Thailand

Tel: (66) 2 331 9364 Fax: (66) 2 331 9365 Email: ave@avethailand.com

www.avethailand.com www.ave.co.th

NORTH AMERICA