



HIGH PERFORMANCE, REAL-TIME NETWORK VIDEO SERVER

The Dedicated Micros DV-IP RT is a stand-alone high-performance recording solution designed for installations requiring high record rates, resolution quality and network capabilities. Available in 8, 16 and 32 input versions, the units recording capabilities of 200 PPS and 400PPS allows up to 16 cameras to be simultaneously recorded at full 4CIF resolution and in real-time. To give operators maximum viewing flexibility, the DV-IP RT can be configured to contain a mixture of spot or main monitor outputs in both Composite and HOMi formats.

With such high quality images and record rates available to the operator the DV-IP RT come equipped with a flexible recording solution. Dedicated Micros groundbreaking **MultiMode** Recording feature is included as standard and internal storage options include 1.5TB models with expansion available via

external high-speed SATA ports. For local archiving and evidence removal the unit also contains an integrated DVD Writer and USB ports.

For seamless operation across technologies and transmission media, the DV-IP RT can integrate analogue, IP and Megapixel cameras onto one platform with a common user interface.

Suitable for enterprise class systems which require high-performance video recording and transmission, the units multi-camera real-time recording capability makes the DV-IP RT ideal for high-security applications such as cash-counting centres, high-value retail surveillance and bonded warehousing.

FEATURES

- ▶ 4CIF at 25pps on all cameras real time viewing and recording
- ▶ Simultaneous MPEG-4 & JPEG transmission and recording
- ▶ **MultiMode** Recording - Dynamically-switchable resolution, record-rate & compression (MPEG4/JPEG) per camera
- ▶ Dual main monitors with Decoder functionality allowing live and playback from other NetVu Connected devices
- ▶ Deep integration of mega pixel IP cameras
- ▶ Composite and HOMi connections
- ▶ Simultaneous record, playback, live viewing, archiving and multiple user network viewing with no loss of recording performance
- ▶ Automatic connection to Remote Video Receiving Centre on alarm
- ▶ Remote Alarm Reporting using Ethernet, Email and SMS
- ▶ False alarm suppression and alternative signalling path
- ▶ Video motion search allows search back through recordings for movement in a specific area of the image
- ▶ NetVu ObserVer remote viewing software
- ▶ Multiway DuoVu for live and recorded viewing simultaneously
- ▶ Can be used for central monitoring applications (BS-8418 compliance^{Note 1})
- ▶ Built-in internal DVD-R (DVD Writer) and USB ports
- ▶ Lip Sync Audio per camera

PLEASE NOTE THAT THIS IS A PRELIMINARY DATASHEET & FEATURES & SPECIFICATIONS COULD BE SUBJECT TO CHANGE



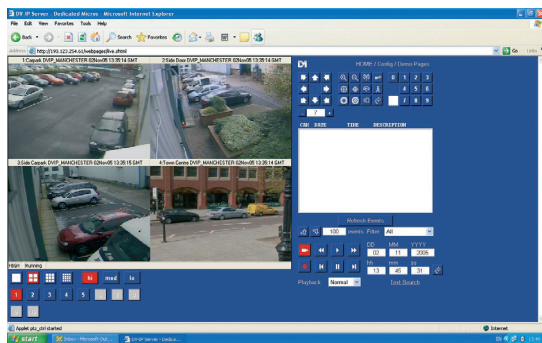
The DV-IP RT comprises 8, 16 or 32 camera inputs, with choices of record rates from 200PPS to 400PPS (PAL).

RECORDING

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

NETWORK CONTROL

Control of DV-IP RT is achieved over Ethernet either by NetVu ObserVer or via a standard web browser. Pre-loaded web pages allow for setup, configuration, image archiving, live viewing, telemetry and playback.



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

DV-IP RT 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.

MultiMode RECORDING

MultiMode recording gives you the ability to set different record rates, resolutions and compression algorithms across scheduled, normal and alarm modes. Up to 24 **MultiMode** Recording profiles can be set per unit, giving you the flexibility to adjust resolution (QCIF to 4CIF), record rates and compression settings (MPEG-4/JPEG) dynamically on individual cameras and across the whole unit.

MULTIWAY DuoVu

DV-IP RT has traditionally provided playback in full screen, picture in picture and quad display modes. Now you can choose to playback in any multiway display mode, right up to 16-way. For ultimate flexibility you can now have any combination of live and recorded segments on the multiway view, allowing you to review recorded material, while keeping an eye to ongoing surveillance.

TEXT SUPPORT

Through the inclusion of (RS) Text features, the DV-IP RT can search captured transaction data e.g. for specific goods purchased, transaction numbers, credit card references, keywords and jump straight to the associated video sequence. Additional functionality allows alarms to be raised on the use of keywords from POS and other devices.

Search and playback is also supported through NetVu ObserVer.

REMOTE ALARM REPORTING

The system can connect to a remote site to provide instant alarm notification.

- Instant alarm reporting
- Alternative signalling path

NETVU CONNECTED

DV-IP RT has NetVu technology built-in to ensure maximum compatibility with future developments in networked security. NetVu technology enables the DV-IP RT to fully interoperate with other NetVu compatible products from DM including the DV-IP Decoder, NetVu Console, NetVu ObserVer and PDA Viewers. NetVu uses industry standard networking protocols supported by the NetVu SDK and a wide range of third-party integration products to ensure on-going compatibility.

RECORD RATE

The DV-IP RT can record real time on up to 16 cameras at 4CIF.

MPEG-4 LIVE VIEWING AND PLAYBACK

This technology ensures that users of bandwidth limited networks have increased opportunity to view video in real-time. Features are provided to ensure the user can configure the DV-IP RT's image resolution, bit rate, and also how many pictures per second to transmit. All images are recorded locally in JPEG format to ensure that recording continues in the event of a network failure.

VIDEO MOTION DETECTION

- 80x64 pixel VMD detection resolution
- Programmable VMD grid with 16 individually definable zones per camera
- 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
- Global VMD relay
- Linkable to alarm zone

VIDEO MOTION SEARCH FACILITY

Allows the user to search through hard-disk recordings for movement in a particular area of the image, set up on a 16x16 (PAL) cell grid (16x14 NTSC). The unit is then able to search back through the hard drive and create a list of activities for the user to view and archive as required.

FLASH DISK OPERATION

To ensure that surveillance and alarm reporting functions are unaffected in the unlikely event of HDD failure, the DV-IP RT has a built-in Flash Disk containing all the essential program and configuration data.

SCHEDULING

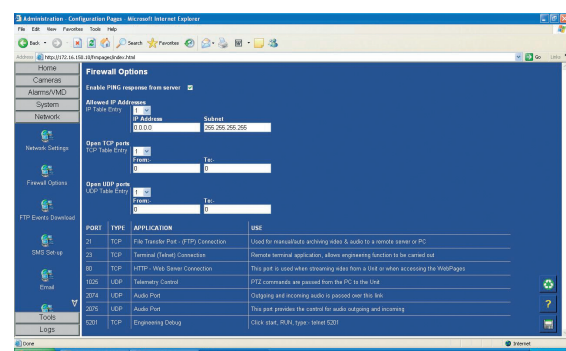
Choice of day, night or weekend scheduling offers the ability to automatically:

- Select the cameras to be recorded
- Switch alarms and activity on/off
- Alter the record rate for standard, alarm and activity recording

Activation is via timer or alarm panel link to Alarm input

SECURITY

DV-IP RT 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 RTs 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 RT is configurable for use on any network large or small.



The DV-IP RT Firewall configuration

WEB BASED CONFIGURATION

Web based configuration enables system adjustments to be made remotely to a networked unit, such as change the record rate, setup the advanced VMD grids, program presets and more – without the need for a site visit.

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TIMED EXPIRY

Timed expiry option allows images to be held for a selected number of days. Images on the disk which are older than the number of days selected are not accessible

CAMERAS

- 8,16, or 32 inputs
- 1V Pk-Pk Video Input (looping)
- PAL, NTSC
- Colour, Mono mix
- 75Ω Camera Termination provided in software

MONITOR VIEWING

The DV-IP RT can be configured to contain a mixture of main or spot monitor outputs in both Composite and HOMi. Two main monitors are available on the 32 channel variant. One main and one spot monitor are available on other variants. Full screen, programmable sequence & alarm switching.

- IP address notification on boot up
- Select the cameras to be recorded
- Switch alarms and activity on/off
- Alter the record rate for standard, alarm and activity recording
- Activation is via timer or alarm panel link to Alarm input

AUDIO ^{Note2} (MONO)

- 2,8 or 16 x Audio Inputs / Outputs (Phono) available depending on model variant
- Full bi-directional audio with recording on each input software selectable
- 47KΩ input / output impedance

RELAYS

- 6 onboard light duty relay output (500mA @ 12V-48V Max)
- Default settings:

- Relay1 – Global alarm/user definable
- Relay2 – Global VMD/ user definable
- Relay3 – Global camera fail/user definable
- Relay4 – Set/Unset notification (BS8418 support ^{Note1})
- Relay5 – Primary signalling failure (BS8418 support ^{Note1})
- Relay6 – User definable

PRE-ALARM

Each camera input can continuously capture a configurable number of images at a user defined pre-alarm capture rate. When an event occurs, the images captured before the alarm event are recorded to disk, allowing the viewer to see enhanced evidence leading up to the event.

FALSE ALARM SUPPRESSION

Advanced alarm zones added to DV-IP RT allow you to combine multiple detection sources to minimise false triggers. E.g. you can set an alarm to be triggered by a combination of a PIR and Camera VMD to remove miss-triggers from either source. Added to this, each alarm input can be temporarily disabled by a remote administrator to ensure that faulty detectors do not mask real alarm incidents.

ALARM CONTACTS

- 18 x Alarm Inputs Total
- 1 x Aux Input (NO/NC only)
- 17 x General Alarm Inputs (tamper ^{Note1} or NO/NC selectable)
- Normally Open/Normally Closed software selectable
- Tamper selectable ^{Note1}

ALARM SUPPORT (BS8418 ^{Note1})

- Tamper (Resistance)
- 0 - 900Ω - Tamper (Short circuit)
- 900 - 1.2kΩ - Normal (Closed)
- 1.2 - 12kΩ - Alarm (Open)
- 12kΩ - Infinity Tamper (Open circuit)
- Voltage Free
- Closed contact operation
- VMD Trigger
- Camera Fail Trigger

ADVANCED ALARM SUPPORT (BS-8418 ^{Note1})

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

COMPRESSION

- Standard JPEG or MPEG-4 format files with user definable compressed image size for high quality recording.
- Simultaneous MPEG-4 network streams for low bandwidth remote viewing or background recording.

NETWORK CAPABILITIES

Ethernet connection allows live and recorded viewing on a networked PC using DM's NetVu ObserVer software or via web pages using a standard Internet browser. Network viewing is independent and does not affect the recording or local operation.

The DV-IP RT includes a network bandwidth limitation option, which allows the bandwidth used by the DVIP Server to be capped. For low bandwidth remote network links, viewing applications can request that video is sent in MPEG-4 format, while local network viewers can simultaneously view using high quality JPEG images.

NetVu ObserVer software and Web page features include:

- Live full, quad, 6, 9, 16, 25 and 36 way screens
- GOTO time and date
- File export of digitally signed images over the network to the user's PC using NetVu software
- Remote manual control of relay output on the unit
- Telemetry control, including PTZ and telemetry presets
- Multiple user access
- Event log
- Network viewing is also available for Mac OSX and Linux
- ARC features supported (such as event manager and incident characterisation).

See the latest NetVu ObserVer datasheet for more information.

DVD-R

Built in slim-line DVD-R writer for DVD-R and CD-R Media.

USB PORTS

USB: 3 x USB 2.0 Connector (1 positioned at front of unit)

NETWORK SUPPORT

- RJ45 Connector
- 10/100/1000 BaseT Auto Negotiation (or forced 10BaseT)
- Network Protocols Supported; IP, TCP, UDP, DHCP, FTP, TELNET, ICMP, HTTP, ARP ,
- Configurable port numbers for HTTP
- Built-in firewall for network intrusion detection and protection

SERIAL PORTS

- 4 x Serial Ports – comprising:
- 2 x Full RS232 (9 wires)
- 2 x RS232 (3 wires) RS485, RS422 (Telem ports)
- Dip switch selectable termination for Com 3 and Com 4

SERIAL PORT OPERATIONAL MODES

- Telemetry, Matrix Control, Debug, Text In Image

SPECIFICATION

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
- Images may be manually protected/unprotected

DIGITAL SIGNATURE

- Automatic Finger Printing on FTP download and on demand via software GUI

TELEMETRY

Coax

- BBV
- BBV RX100 (protocol converter for control of major manufacturer's domes)
- Pelco Spectra II & III (Please note that patrol modes are not available)

Serial

- Dedicated Micros 2040, 2060
- JVC TK-C675BE, TK-C676 & TK-C553E
- Ultak Ultradome™ KD6
- Ademco Orbiter & Jupiter Microspheres™
- GE CyberDome™
- BBV RE485 StarCard
- Bosch/Philips G3
- Ernitec
- Mark Mercer
- Panasonic WV-CS850A, WV-CS854, WV-CW860 external
- Sensormatic SpeedDome™ IV & SpeedDome™ V (with 4-wire RS-422 support)
- Pelco P Spectra II, Spectra III
- Samsung SCC-641
- Vista Power Dome

SUPPORT APPLICATIONS

- NetVu ObserVer

DV-IP RT RANGE

DV-IP 8 RT 30 DAYS

DV-IP 16 NRT 30 DAYS

DV-IP 16 RT 14 DAYS

DV-IP 32 NRT 14 DAYS

BROWSER SUPPORT

- IE 5.5 and above
- Netscape 4.7 and above
- Firefox 1.5 and above

DEVELOPERS SUPPORT

- Java (Via the DM Software Developers Kit)

COLOUR RESOLUTION

Sampling rate: 13.5 MHz to CCIR 601

Number of pixels: PAL 720h x 512v

NTSC 720h x 448v

16.8 million colours 256 levels of grey, 8-bit luma.

LANGUAGES

English, French, German, Spanish, Italian, Russian, Czech, Polish, Dutch, Hungarian, Swedish, Portuguese, Turkish, Croatian, Danish, Finnish, Norwegian, Arabic, Chinese.

TEMPERATURE RANGE

Operating temperature 5 – 40°C (41 – 104°F).

RELATIVE HUMIDITY

10% - 85% Non-condensing.

DIMENSIONS

DV-IP RT:

- 89mm (H) x 440mm (W) x 500mm (D)
- 3½" (H) x 17½" (W) x 17½" (D)

WEIGHT

DV-IP RT: 11.4 kg (25.1 lbs) with built-in PSU.

POWER SUPPLY

- DV-IP RT: 180W Internal Power Supply
- Input Voltage: 100-240 V AC 50/60Hz.

WARRANTY

3 years warranty including HDDs.

ACCESSORIES

REMOTE ALARM MODULE

RELAY OUTPUT MODULE

RAID

NETVU CONSOLE

PLEASE CHECK THE WEBSITE FOR DETAILS OF COMPATIBLE PRODUCTS AND OTHER LATEST DEVELOPMENTS

Note 1 - BS8418 is the UK code of practice for remotely monitored detector activated CCTV systems.

Note 2 - Second audio channel will be enabled in a future software release.



www.dedicatedmicros.com

The manufacturer reserves the right to change the specification without notice.

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MKT-DVRT-D-001E

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