

# DIGITAL sprite Server



## PROFESSIONAL NETWORK VIDEO SERVER

As a powerful and flexible DVR, the DS Server fulfils the majority of networked surveillance requirements. It's extensive set of leading edge technologies, and simple to install features means it is ideal for sites that require remote monitoring.

The DS Server offers the installer a simple set-up process. On initial start-up, the immediate notification of the unit's IP address is displayed on screen via a connected composite monitor. This eliminates the need to connect a laptop to set or find the IP address. Alarm reporting,

FTP archiving, JPEG/MPEG-4 transcoded video transmissions and MultiMode Recording can all be accessed and configured through the network.

The balance of a simple installation and comprehensive remote monitoring features is provided by the DS Server without compromise. As part of the 'NetVu Connected' family the new DS Server is built to adapt to future advances in security technology, protecting your investment for years to come.

### FEATURES

- ▶ IP notification through a connected spot monitor simplifies the installation process
- ▶ Simultaneous MPEG-4 & JPEG transmission and recording
- ▶ Designed for central monitoring applications (BS-8418 compliance <sup>Note 1</sup>)
- ▶ 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
- ▶ Pre-alarm recording to capture evidence before alarms are triggered
- ▶ Instant alarm reporting (including dial-out on alarm)
- ▶ False alarm suppression and alternative signalling path
- ▶ Immediate access to any time/date via instant GOTO capability
- ▶ Video motion search allows search back through recordings for movement in a specific area of the image
- ▶ Web based configuration allows remote system adjustments negating the need for site visits
- ▶ Multiway DuoVu for live and recorded viewing simultaneously
- ▶ MultiMode Recording - Dynamically-switchable resolution, record-rate & compression (MPEG4/JPEG) per camera
- ▶ Built-in web server for configuration and viewing
- ▶ Free NetVu ObserVer remote viewing software



The DS Server comprises 6, 10 and 16 camera inputs, with record rates of 100PPS, combined with the latest hard disk capacities.

## RECORDING

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

## NETWORK CONTROL

Control of DS Server 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.

DS Server 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.

## IP ADDRESS DISPLAY

The DS Server offers the installer a simple set-up process. On initial start-up, the immediate notification of the unit's IP address is displayed on screen via a connected composite monitor. This eliminates the need to connect a laptop to set or find the IP address and saves valuable installation time.

## MULTIWAY DUOVU

DS Server 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.

## 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.

## TEXT SUPPORT

Through the inclusion of RS Text features, the DS Server can search captured transaction data for specific goods purchased, transaction numbers, credit card references, keywords etc. 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.

## INSTANT ALARM REPORTING

The system can dial-out on alarm to a remote site to provide instant alarm notification.

- Instant alarm reporting
- Dial-out on alarm
- Alternative signalling path

## NETVU CONNECTED

DS Server now has NetVu Connected technology built-in to ensure maximum compatibility with future developments in networked security. NetVu Connected technology enables the DS Server to fully interoperate with other NetVu Connected products from DM including the DV-IP Decoder, NetVu ObserVer and PDA Viewers. Providing interoperability between the worlds leading security companies, NetVu Connected uses industry standard networking protocols supported by a wide range of third-party integration products and SDKs to ensure on-going compatibility for

## 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 DS Server'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
- 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

## 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. Searching can also be filtered to limit the search to user-defined times and dates.

## RECORD RATE

The DS Server can record at 100PPS (PAL), 120PPS (NTSC).

## FLASH DISK OPERATION

To ensure that surveillance and alarm reporting functions are unaffected in the unlikely event of HDD failure, the DS Server 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

## 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

## WEB BASED CONFIGURATION

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

## CAMERAS

- 6, 10, and 16 inputs
- 1V Pk-Pk Video Input (looping)
- PAL, NTSC
- Colour, Mono mix
- 75Ω Camera Termination provided in software

## MONITOR VIEWING

Spot monitor: (Composite)

Full screen, programmable sequence & alarm switching.

- 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 <sup>Note 2</sup> (MONO)

- 2 x Audio Inputs - Phono
- Full bi-directional audio with recording on each input software selectable
- 8Khz
- 47KΩ input impedance
- 2 x Audio Output - Phono
- 47KΩ 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 support1)
- Relay5 – Primary signalling failure (BS8418 support1)
- 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 DS Server 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 <sup>Note 1</sup> or NO/NC selectable)
- Normally Open/Normally Closed software selectable
- Tamper selectable <sup>Note 1</sup>

## ALARM SUPPORT (BS8418 <sup>Note 1</sup>)

- 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 <sup>Note 1</sup>)

- Tamper proof alarm inputs
- Nuisance 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

## COMPRESSION

- Standard JPEG 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

A standard 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 DS Server includes a network bandwidth limitation option, which allows the bandwidth used by the DS 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, 36 way screens
- GOTO time and date
- File export of digitally signed images over the network to the user's PC using NetVu software
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- 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
- RVRC features supported (such as event manager and incident characterisation).

See the latest NetVu ObserVer datasheet for more information.

## NETWORK SUPPORT

- RJ45 Connector
- 10/100 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 DM485 Bus, Com 3 and Com 4

## SERIAL PORT OPERATIONAL MODES

- PPP, Telemetry, Matrix Control, Debug, Text In Image

## 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

# SPECIFICATIONS

## 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

## IP CAMERA SUPPORT

- Axis 211, 211A
- JVC VNC20U
- DM IP Dome

## SUPPORT APPLICATIONS

- NetVu ObserVer

## 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

### DS Server:

- 89mm (H) x 440mm (W) x 445mm (D)
- 3½" (H) x 17<sup>5</sup>/<sub>16</sub>" (W) x 17½" (D)

## WEIGHT

DS Server: 11.4 kg (25.1 lbs) with built-in PSU.

## POWER SUPPLY

- DS Server: 180W Internal Power Supply
- Input Voltage: 100-240 V AC 50/60Hz.

## WARRANTY

3 years warranty including HDDs.

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

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

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

Dedicated Micros UK  
Dedicated Micros USA

1200 Daresbury Park, Daresbury, Warrington, WA4 4GB Tel: +44 (0) 845 600 9500 Fax: +44 (0) 845 600 9504  
14434 Albemarle Point Place, Suite 100, Chantilly, Virginia 20151 USA Freephone: 800 864 7539  
Tel: +1 703 904-7738 Fax: +1 703 904-7743 and 23456 Hawthorne Blvd, Suite 100, Torrance, CA 90505,  
Tel: +1 310 791-8666 Fax: +1 310 791-9877.

Dedicated Micros Germany  
Dedicated Micros France

Neckarstraße 15, 41836 Hückelhoven, Germany Tel: +49 243 352 580 Fax: +49 24 33 52 58 10.  
9-13 rue du Moulinet, 75013 Paris, France Tel: +33 1 45 81 99 99, Fax: +33 1 45 81 99 89.

Dedicated Micros Asia  
Dedicated Micros Australia  
Dedicated Micros Malta

16 New Industrial Road, #03-03 Hudson Techno Centre, Singapore 536204 Tel: +65 62858982 Fax: +65 62858646.  
5/3 Packard Avenue, Castle Hill, NSW 2154, Australia Tel: +612 9634 4211 Fax: +612 9634 4811.  
UB 2, San Gwann Ind. Est., San Gwann, Malta Tel: +356 21483 673 Fax: +356 21449 170.

Dedicated Micros Middle East

Building 12, Suite 302, P.O.Box 500291, Dubai Internet City, Dubai, United Arab Emirates  
Tel: +971 (4) 390 1015, Fax: +971 (4) 390 8655.

Dedicated Micros Slovenia  
Dedicated Micros Benelux

Delavska cesta 24, 4208 Sencur, Slovenia Tel: +386 4 279 18 90 Fax: +386 4 279 18 91.  
Joseph Chantraineplantsoen 1, 3070 Kortenberg, Belgium Tel: +32 2751 3480 Fax: +32 2751 3481.



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