



## FEATURE PACKED DVR RANGE WITH TELEMETRY



The SD Range offers the user a high performance, easy to use plug and play DVR with selectable record duration providing up to 30 or 60 days recording.

Now available in 4<sup>^</sup>, 8, 12, 16 and 32<sup>^</sup> channel variants, the SD Range offers consistent recording duration and smooth motion video on ALL cameras out of the box.

New "Normal, Medium and Low" recording models have been created which maintain consistent performance per camera, and off the shelf, guaranteed storage of up to 30 or 60 days. This allows the customer to build a CCTV solution that removes the need for extensive configuration.

Menus allow per channel configuration to utilise full global PPS. Of course for those looking for more advanced features the SD's common user interface can be configured locally via

its IR Remote Control/optional keyboard or remotely via web pages. Activity Detection, Alarm Reporting, Text support (for POS transactions), **MultiMode** Recording and of course Coax & Serial Telemetry are all included as standard in the SD Range.

In addition, key variants in the range are able to take advantage of the advances in DM's software analytics programme. The **AnalyticsCapable**\* technology recently introduced by Dedicated Micros will allow the user to deploy features such as ANPR, Object Left and Removed, Access Control and People Counting to further enhance the value of their SD Range security solution.

With the perfect combination of out of the box practicality and unrivalled levels of performance, the SD Range is the perfect mid-level DVR.

\*Via hardware upgrade

^Available shortly after product launch

## FEATURES

- ▶ 4<sup>^</sup>, 8, 12, 16, 32<sup>^</sup> camera input options
- ▶ Easy to select record settings for 7, 14, 30 or 60 days recording (model variant dependent)
- ▶ Consistent performance per camera guaranteed for 30 or 60 day storage
- ▶ Compatible with external SATA storage devices via DM Managed Storage Units to give an additional 3.75TB
- ▶ Telemetry support (Coax & Serial)
- ▶ **MultiMode** Recording - Dynamically-switchable resolution, record-rate & compression (MPEG4/JPEG) per camera
- ▶ Live and playback viewing on local composite monitor and over Ethernet
- ▶ JPEG or MPEG-4 recording and transmission
- ▶ Built in CD-R writer and USB ports for download of video archive to external flash memory
- ▶ **AnalyticsCapable** on 8, 12 and 16 channel Normal rate units
- ▶ All DVR functions fully supported by unique colour coded soft key control via IR Remote or optional keyboard
- ▶ BS8418 compliant remote alarm reporting
- ▶ Text support and text search features ideal for retail installations
- ▶ Touch keyboard and 3-axis joystick keyboard available as options
- ▶ Can be configured via USB mouse and USB QWERTY keyboard
- ▶ Displays common configuration interface when accessed locally at the unit or remotely via a web browser





### GUARANTEED 30 OR 60 DAY STORAGE

Consistent performance per camera guaranteed for up to 30 or 60 day storage.

### EASILY SELECTABLE RECORDING

Easy to select record settings for 7, 14, 30 or 60 days recording (model variant dependent).

### DEFAULT RECORDING SETTINGS

New "Normal, Medium and Low" models provide out of the box:

- High performance recording on ALL cameras with minimal configuration
- Consistent recording duration and smooth motion video per camera regardless of the number of cameras

#### Normal

- Continuous 5pps MPEG4 recording on all cameras, on all channel variants (default out of the box)

#### Medium

- Continuous 2pps MPEG4 recording on all cameras, on all channel variants (default out of the box)

#### Low

- Continuous 1pps MPEG4 recording on all cameras, on all channel variants (default out of the box)

### COMPLETE FLEXIBILITY

If a target number of days recording is less than 30 or 60 days – the picture quality can be increased.

The advanced record menu can also be individually configured by the installer to suit specific requirements, so they still have the flexibility to set specific cameras to much higher record rates. E.g. Entry/Exit routes.

Various storage sizes are available dependant on the combination of the number of cameras, the 30 or 60 day storage options and the 'Normal, Medium and Low' setting selected.

### CAMERAS

4, 8, 12, 16 and 32 camera inputs available. Auto detection on power up. Non-looping BNC connectors provided for each camera input. Alarm on Camera Fail.

### RECORD RATE

Global record rates of up to 100pps (PAL), 120pps (NTSC), the SD Range is able to offer recording of up to 5pps on each camera on the unit, out of the box. Please refer to the table on the last page of this datasheet for model variants and options.

### RECORDING

Playback and record to hard disk simultaneously. Alarmed or manually selected images can be protected from being overwritten.

### LANGUAGES

Including: English, German, French, Spanish, Italian, Portuguese, Dutch, Danish, Finnish, Norwegian, Swedish.

### MONITOR VIEWING

Main monitor:

Full screen, picture in picture, quad viewing and multiscreen

Mon A: Composite video BNC connector.

Spot monitor: Full screen, sequence Mon B: Composite video BNC connector.

### HIDDEN CAMERAS

Option to view all or selected cameras, without affecting cameras recording.

### SCHEDULING

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

- Alter the record rate for background alarm and activity recording

Activation is via a timer or keyswitch 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

### ALARMS AND RELAYS

5, 9, 13 or 17 normally open/closed tamper proof alarm inputs via back panel. 1 Global keyswitch input, 4, 8, 12 or 16 camera specific inputs configurable as entry/exit route alarms and 4 relay outputs.

### ALARMS

Individual configurable alarm responses include; move camera to preset, activate a relay, remote alarm reporting, email on alarm, log event, switch camera, activate sounder.

### ACTIVITY DETECTION

Each activity detection will switch the selected camera from normal record profile to alarm record profile. This feature can also; log the event, activate a relay, trigger a sounder, switch camera, email on activity and remote alarm reporting.

### AUDIO

The user has the option to record and play back audio through the unit in real time. Recorded with images, audio can be played back directly from the unit via powered external speakers.

Connections: *Line in: 1V pk-pk, RCA phono socket*  
*Line out: 1V pk-pk, RCA phono socket*

### E-MAIL NOTIFICATION

Emails can be sent on alarm or other critical events.

Notifies the following events on a camera by camera basis:

- Alarm
- Activity
- Camera fail
- Power up

Access to mail server via Ethernet is required for this feature.

### SEARCH AND PLAYBACK

- Fast picture search and pause keys
- Event list, including event list filter with unique quadrant preview facility
- GOTO time and date
- Playback in quad, multiscreen, picture in picture and full screen

### EVENT COPYING

Event sequences and user defined recorded sequences can be saved to a CD via the integrated CD-writer or to external flash memory through the USB port.

## MANAGED STORAGE FOR CCTV

- Support of a single DM Managed Storage expansion unit connected via external SATA connection
- Managed Storage Units provide a high-capacity, environmentally managed storage in a single box
- Disk temperature is maintained at a constant level, extending drive life
- Management of disks running - only spinning those in use can extend drive life
- Due to changing drive sizes contact DM's Customer services department for the latest details on DM Managed Storage Units models

## FIELD SERVICEABLE HARD DRIVES

- Available on all models
- 4 channel variants have fast access compartment for removal and replacement of drives
- 8/12/16/32 channel variants require attendance on a Free DM Hard Drive Course for certification. Contact DM Customer Services for further details

## TEXT SUPPORT

Through the inclusion of Text Support, the SD can search captured transaction data for specific goods purchased, transaction numbers, credit card references, keywords etc. and jump straight to the associated video sequence. Text Support can be assigned to any 2 cameras on the unit.

## NetVu Connected

The SD Range has NetVu Connected technology built-in to ensure maximum compatibility with future developments in networked security. NetVu Connected technology enables the SD Range to fully interoperate with other NetVu Connected compatible 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 the future.

## NETWORK CAPABILITIES

A standard Ethernet connection allows live and recorded viewing on a networked PC using DM's NetVu ObserVer software. Network viewing is independent and does not affect the recording or local operation. The SD Range includes a network bandwidth limitation option, which allows the bandwidth used by the SD Range 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 (supplied with the product)

### NetVu ObserVer software features include:

- Live full, quad, 6, 9, 16 and 32 way screens
- VCR style fast forward and rewind, playback and frame advance/rew
- GOTO time and date
- File export of digitally signed images over the network to the user's PC
- Viewing of archived images
- Telemetry control, including PTZ and telemetry presets
- Multiple user access
- Site maps
- Network viewing is also available for Mac OSX and Linux
- Multi-site viewing

See the latest NetVu ObserVer datasheet for more information.

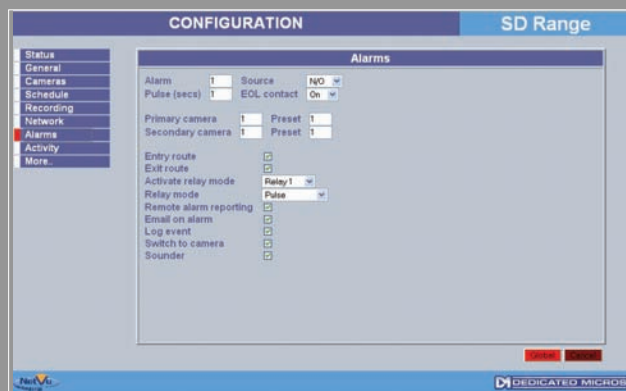
## AnalyticsCapable

AnalyticsCapable products can be upgraded to run a range of D-Tec video analytics solutions including; ANPR, Object Left, Object Counting, Object Removed and Intrusion Detection / Perimeter Protection. Developed within the AD Group development team, our analytics technology seamlessly integrates with a range of our world leading NetVu Connected DVR's - including DV-IP Server, DV-IP RT, DV-IP Codec, CamVu2000 Megapixel IP Camera. Seamless control and viewing of the analytics can be done from NetVu ObserVer, allowing the user to use one single platform for their monitoring.

Available via a hardware and software license upgrade on AnalyticsCapable Digital Video Recorders and other NetVu Connected devices.

## COMMON CONFIGURATION INTERFACE

A Common Configuration interface is displayed when the units' configuration screens are accessed locally at the unit or remotely via a web browser. This unified system ensures that the installer is familiar with the configuration screens irrespective of their location to the unit, minimising training and familiarisation time and increasing the speed of installation and alteration to features.



## SOFT CONTROL FUNCTIONALITY

The SD Range is controlled via unique colour coded soft keys. Colour coded keys on the units' control devices (IR Remote and Keyboard) relate to commands on the main monitor, simplifying operation and control for the user.

## FLEXIBLE CONTROL OPTIONS

The SD Range is controllable from a range of input devices giving the user maximum flexibility in how they deploy and use the unit. Control devices include:

- Full IR remote control for all functions (shipped with product)
- New touch keyboard and 3-axis joystick keyboard
- USB Mouse & QWERTY Keyboard
- NetVu Console & NetVu ObserVer for control over the network

## MultiMode RECORDING

MultiMode recording gives you the ability to set different record rates, resolutions and compression algorithms across scheduled, normal and alarm modes. 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.



# SPECIFICATION

## TOUCH KEYBOARD

Available as an optional extra, the keyboard offers all the control functionality that you require. Through the keyboard the user is able to use all the functionality of connected PTZ cameras and domes, FWD, REW, Pause, Stop and Play recorded material, copy data to external media, operate the panic button, and adjust the viewing configurations.

## TELEMETRY

Built-in RS485/Twisted pair and coax protocols provide direct control of the numerous domes including but not limited to the following:

- Dedicated Micros Dennard 2040 to Dennard 2060
- Honeywell / VCL Orbiter & Jupiter Microspheres™
- GE CyberDome™ • BBV RS485 StarCard • Bosch/Philips G3
- Pelco P Spectra II, Spectra III • American Dynamics
- Panasonic

## COLOUR RESOLUTION

Sampling rate: 13.5 MHz to CCIR 601  
16.8 million colours 256 levels of grey, 8-bit luma

## COMPRESSION

JPEG & MPEG-4 format files.

## RESOLUTION

Up to 4CIF resolution  
PAL: Max 704h x 512v, NTSC: Max 704h x 480v  
See *MultiMode* section for more information

## DATA PORTS

Serial Ports: 2x RS485, 2x RS232  
Ethernet: 1x Ethernet RJ-45 10/100 Ethernet connection.  
USB: 3 x USB 2.0 Connector (1 positioned at front of unit)  
Keyboard: 1 x RJ12

## ENVIRONMENTAL

Temperature range: 5 - 40°C  
Relative humidity: 10% - 85% Non-condensing.

## WARRANTY

2 years warranty including HDDs.

## IR REMOTE CONTROL

Operation of PTZ camera selection and control, Copy of data to external media, Panic button, live and playback review controls, viewing configurations and soft control functionality.



## TOUCH KEYBOARD AND IR REMOTE CONTROL

SHORT ORDER CODE	USER SELECTABLE RECORD DURATION UP TO	VIDEO INPUT	DEFAULT PER CAMERA PPS RECORDING	GLOBAL PPS
SD4 N30	30 DAYS	4	5	50
SD8 N30	30 DAYS	8	5	50
SD12 N30	30 DAYS	12	5	75
SD16 N30	30 DAYS	16	5	100
SD16 M30	30 DAYS	16	2	50
SD32 L30	30 DAYS	32	1	50
SD32 M30	30 DAYS	32	2	100
SD4 N60	60 DAYS	4	5	50
SD8 N60	60 DAYS	8	5	50
SD12 N60	60 DAYS	12	5	75
SD16 N60	60 DAYS	16	5	100
SD32 L60	60 DAYS	32	1	50
SD32 M60	60 DAYS	32	2	100

ACCESSORY	DESCRIPTION	SHORT ORDER CODE
TOUCH KEYBOARD	TOUCH KEYBOARD FOR SD RANGE	KBC1
JOYSTICK KEYBOARD	JOYSTICK KEYBOARD FOR SD RANGE	KBC2
IR REMOTE	ADDITIONAL IR REMOTE FOR SD RANGE	RC06



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Dedicated Micros USA

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Dedicated Micros France  
Dedicated Micros Asia  
Dedicated Micros Australia

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