

Release Notes - The New Digital Sprite 2 - v4.4 (013)

IMPORTANT INFORMATION

Since Software Issue v4.2(003), the default Usernames and Passwords have been changed.

Webpage Configuration :Username = dm	password = web
Video FTP :Username = dm	password = ftp
FTP Admin :Username = dmftp	password = ftp
Telnet :Username = dm	password = telnet
Serial :Username = dmconsole1	No password as default


Digital Sprite 2 Feature List

The Digital Sprite 2 has always set the standard for easy to use, reliable digital video recording with integrated telemetry control. Now a new generation of the DS2 includes "NetVu Connected" technology and **simultaneous MPEG-4 and JPEG transmission and recording** to provide advanced networking functionality. On-site operations have been enhanced as well with features such as **DVD archiving** and **DuoVu**, whilst new remote functionality including Instant Alarm Reporting (including **dial-out on alarm**) and an **alternative signaling path** mean that you can find out about a situation in time to control it. In yet another industry first for Dedicated Micros the new DS2 can dynamically-switch between resolution, record-rate & compression using **MultiMode** Recording. All of these features come in one easy-to-use box.

The combination of a user-friendly interface, remote management capability and leading edge features mean that the new DS2 can provide greater control and flexibility than ever before. As part of the 'NetVu Connected' family the new DS2 is built to adapt to future advances in security technology, protecting your investment for years to come.

The list below highlights the main feature improvements to the DS2.

Feature		New DS2
Easy Startup		
Auto record on power up		✓
Auto camera detect and add to auto record		✓
Configurable recorded image size		✓
Configurable standard record rates		✓
Alarm Features		
Logical alarm zones for false alarm suppression	New	✓
Tamper proof alarm support	New	✓
Archive on event	New	✓
Activate telemetry presets on alarm		✓
Fully configurable alarms		✓
Advanced Recording		
MultiMode	New	✓
Enhanced pre-alarm	New	✓
Write once recording	New	✓
Schedule times per weekday	New	✓
Basic timer schedule with weekend override		✓
Text Support	New	✓
Contact toggled schedule		✓
Motion Detect & Smart Search		
Advanced VMD (16 rectangular areas)	New	✓
Improved Activity grid mask resolution	Improved	16X16
Basic activity detect (Single grid mask)		✓
Smart search (Single grid mask)		✓
Timed Expiry & Image Protection		
Timed expiry of video viewing		✓
Image protection		✓
Audio		
Two-way remote network audio	New	✓
Record and playback local audio		✓
Telemetry		
Telemetry – 485 Bus B independent of Bus A	New	✓
Telemetry – 232 Matrix support	New	✓
Telemetry – 485 Bus A		✓
External Storage		
RAID/JBOD support	Improved	10TB

Feature		New DS2
User configuration & viewing		
DuoVu - playback and live on main monitor	New	✓
Title removal from main and spot monitor	New	✓
Hidden camera support		✓
OSD Multi-level passwords		✓
Monitor Switching		
Alarm sequence/multiscreen on main monitor	New	✓
Alarm switch/sequence on spot monitor	New	✓
Alarm switch on main monitor		✓
Sequenced main monitor		✓
Sequenced spot monitor		✓
Networking		
 NetVu	New	✓
JPEG Record and viewing		✓
MPEG-4 Record and viewing	New	✓
Instant alarm reporting (including dial out on alarm)	New	✓
Dual network alarm reporting paths	New	✓
SMS reporting	New	✓
Web cam uploads	New	✓
Network viewing		✓
Network telemetry		✓
Network configuration		✓
Email on alarm		✓
Optical Archiving		
DVD archive support with built-in recorder	New	✓
CD archive support		✓
External Connections		
Text insert in base product	New	✓
485-Bus remote keyboard control		✓
485-Bus unit networking, up to 16 units		✓
IR Remote support		✓
NetVu ObserVer		
Multi-Site Viewing	New	✓
Built-in Replay Server	New	✓
Drag & Drop GUI	New	✓
Plug-in map application	New	✓

The NEW NetVu ObserVer Software

Seamless Viewing with NetVu ObserVer

Dedicated Micros NetVu ObserVer video management software, allows users to seamlessly view distributed images from any "NetVu Connected" product, such as the DV-IP Server and New Digital Sprite 2, from any moment in time, anywhere in the world.

Built-in MPEG-4 support provides simultaneous viewing of both JPEG and MPEG-4 video streams, allowing the user to optimise bandwidth usage on constrained networks. A straight forward drag and drop GUI, together with saved screen views provide the user with an easy to use viewing solution, offering a seamless single user interface to all NetVu Connected products.

In addition, NetVu ObserVers' built-in replay server allows the application of features (such as picture in picture, and GOTO event search) to archived data from a hard drive, server or DVD / CD.

Single site and Multi-site mode – Supporting the ability to select a single NetVu Connected unit and take control of each video camera on the unit and view all cameras in multiscreen format. Alternatively the application also supports the ability to select and control **multiple** NetVu Connected units, displaying cameras from each of the units being controlled.

Map Support – The NetVu ObserVer includes the option for an Operator to control selection of cameras via the interactive map support within the software, allowing the camera location to be easily identified.

MPEG4 Video Format – Supporting the option to switch between live viewing in JPEG or MPEG4 video format. A single keypress will switch the video images from the NetVu Connected unit from JPEG to MPEG4 and vice-versa. MPEG4 provides faster update rates over bandwidth constrained networks.

Alarm Receiving capabilities – The NetVu ObserVer supports the ability to receive events triggered on the NetVu Connected device and allow the Operator to take the appropriate action. The alarms can also be distributed to other PC's running the ObserVer application for a complete and secure monitoring solution.

Site Tree - The application supports a site tree which displays all units and cameras that are accessible to the Operator. This allows simple selection of a unit or a specific camera within the list.

'Drag & Drop' – The NetVu ObserVer has been designed to ease camera and monitor selection for the Operator by simply selecting a camera from the site tree and dragging this to the monitor segment for display.

Replay Server – the NetVu ObserVer application supports an integrated replay server that allows recordings that have been archived (to the local PC hard drive, an external server or a CD) to be accessed and reviewed instantly, removing the need for a dedicated playback application.

Video Download – The feature allows an Operator to download recorded video allowing important evidence to be made available for review. This video can then be reviewed, using the replay server feature of the NetVu ObserVer, at a replay station and will not take the Operator away from his task of monitoring the live video.

Audio Transmission – The application provides the user access to control the audio over the network providing a bi-directional audio link between the NetVu Connected unit and the Operator PC.

Picture in Picture – The multiscreen options have been enhanced with the inclusion of picture-in-picture format.

Multilingual Support – The software supports numerous languages.

Event Preview Window – The NetVu ObserVer provides an event preview window allowing the Operator to select an event from the list and preview the associated recorded video.

Text Search – For systems where text has been recorded in conjunction with the video it is possible from the NetVu ObserVer to interrogate the recorded video using key words.

Smart Search – The NetVu ObserVer provides an interface to allow an activity area to be highlighted on recorded images and a post-recording search can take place.

Save and Recall Reference Images – The application provides the facility for an Operator to save a specific image reference and will allow these to be easily accessed at a later date.

Save & Print – The NetVu ObserVer allows an Operator to save or print an image currently being viewed.

Local Recording – It is possible to record images locally to the PC running the ObserVer application, these images can then be reviewed using the Replay function of the software.

Electronic Zoom – NetVu ObserVer provides the option to use the electronic zoom function allowing images to be viewed at up to 800%.

* The NetVu ObserVer is supplied with the New Digital Sprite 2; previous applications (DM Network Viewer, PC Playback and Remote Admin Program) are not compatible with the New DS2. Please note that software patches are available for previous generations of DS2 units to allow them to interoperate in a NetVu Connected network.

MultiMode Recording

MultiMode has been added to the Digital Sprite 2.

MultiMode recording offers the ability to set different recording rates, resolutions and compression across scheduled, normal and alarm modes, or to mix a standard setting for many cameras with individual settings for particular cameras and time of day. By varying the quality (bitrate) of the recorded image, users can increase recording capability of the unit.

MultiMode recording offers:

- Ability to set different recording resolutions including 704x512, 704x256, 352x256 and 176x128.
- Ability to set MPEG or JPEG compression recording.
- Ability to set PPS recording rates.
- Dynamically switchable resolution when switching from Normal to Event Recording.
- Dynamically switchable compression between MPEG4/JPEG from Normal to Event Recording.

Additional Information

Constant Bit Rate settings - The CBR calculations are worked out so that a network connected stream will deliver the correct bitrate. The recorded stream also stores periodic I frames which are not included in the CBR calculation. This may affect the number of days storage.

OSD Record Calculator - The record calculator on the on-screen menu's uses the settings for *Standard Record* only to calculate the system storage requirements.

To obtain an indication of the record duration for *Standard* and *Profile* recording use the record calculator on the Web interface.

Please remember these calculations are an indication only.

OSD and Web Response - Please be aware if the Digital Sprite 2 record settings are set to maximum it is possible that the response to commands issued via the on-screen or web menus may be slower

Manual Addendum

The following details the changes to the Digital Sprite 2 Setup Guide since the manual was printed; this introduces the Advanced Alarms feature, MultiMode Recording, Text In Image, Hard Disk Failure, Selective Archiving and FTP Continuous Archiving capabilities on the New DS2

Note: The amendments detailed in this document show the local Installer (on screen display) menus, these changes are also reflected in the web configuration pages. Refer to the Digital Sprite 2 Networking manual supplied on the product CD.

Time, Date and Language - Digital Sprite 2 Setup Guide (MI-I-DS2AD/M1-0) Page 17

Croatian, Finnish and Chinese has been added to the system to allow the OSD menus to be displayed in this language.

Schedule - Digital Sprite 2 Setup Guide (MI-I-DS2AD/M1-0) Page 19

The option to enable holiday profiles has been added to the Schedule page on the New DS2.

Schedule		
Schedule Type	Timed	Zone Control, Timed
Night	On	On Between, 7 Day Timer, Off, On
Weekend	Off	On Between, Off
Keyswitch	None	Direct, Aux, Module 1 - Module 16, None
Holiday	Edit	

Holiday

The holiday profile option allows a user to identify alternative schedule settings that will be actioned on specific dates; this will ensure the system continues to operate during periods when operators are not present or times where the standard schedule settings are not appropriate, e.g. bank holiday weekends.

Holidays				
Current list	01/02/2006	Profile 1	Delete	
New date	02/02/2006	Profile 1	Add	
Profile 1	Timed	Day 09:00	Night 18:00	24 Hr Day, 24 Hr Night
Profile 2	Timed	Day 09:00	Night 18:00	24 Hr Day, 24 Hr Night
Profile 3	Timed	Day 09:00	Night 18:00	24 Hr Day, 24 Hr Night
Profile 10	Timed	Day 09:00	Night 18:00	24 Hr Day, 24 Hr Night

Profile

There are ten profiles each can be individual configured for activate period and time settings.

Active Period

The options available are:

Timed (default) - provides the time period settings, the unit will use the Day settings for the period selected and will switch to the Night settings at the specified time.

24 Hr Day - The profile will only use the Day settings for the selected date.

24 Hr Night - The profile will only use the Night settings for the selected date.

Standard Record Schedule - Digital Sprite 2 Setup Guide (MI-I-DS2AD/M1-0) Page 20

The Standard Record Schedule has changed to include the option to select an image resolution alongside the image file size ensuring that the recorded image (for standard recording) meets the requirement of the system.

Standard Recording		Units	PPS	Standard Rate	Events Rate	Event Active	Event Mode
Day		6	6	Both	Disabled, Alarms, Activity, Both	Unchanged	Unchanged, Interleave Exclusive
Night		6	6	Both	Disabled, Alarms, Activity, Both	Unchanged	Unchanged, Interleave Exclusive
Weekend		6	6	Both	Disabled, Alarms, Activity, Both	Unchanged	Unchanged, Interleave Exclusive
Image size			18KB	High	Edit	05 - 46KB	
Record cameras		Edit					
No. 5 second events per hour		000					
Maximum Record Time		-- Days -- Hours					
Maximum Storage (Protected %)		0300 GB (00%)		55			
Earliest unprotected recording		31/May/2005					

Image size

The Digital Sprite 2 supports both JPEG and MPEG-4 compression for high quality recording and image display. Images recorded using the standard recording settings are stored in JPEG format. The settings applied to these images are configurable.

The image size has two configurable parameters, File Size and Image Resolution.

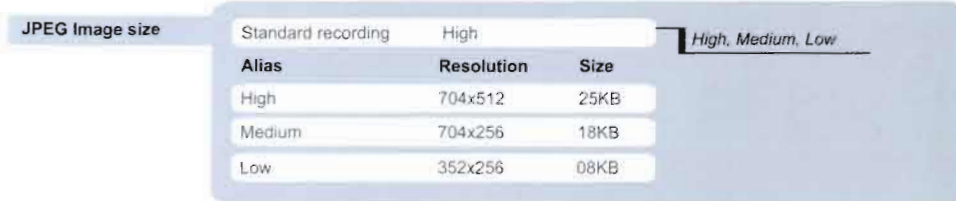
The file size setting can be configured between 5 to 45 KB. This determines the size of the images that will be stored on the hard drive. A larger file size allows more detail to be included in the recorded video and provides higher picture quality, however this also means that the hard disk will be filled faster and images will be overwritten sooner.

The image resolution setting has been included to allow the most appropriate image resolution to be configured in line with the selected file size. The image resolution is the number of pixels captured in each image.

To Edit the JPEG image resolution highlight Edit to display the JPEG Image size screen.

No. 5 seconds events per hour

This parameter enables accurate calculation of recording capacity of the DS2. Enter the expected number of 5 second events that will be recorded during an hour. The system will use this estimate to calculate the expected hard disk usage.



Note: When the High, Medium or Low options are highlighted the screen will display information on where the JPEG image alias is used, i.e. JPEG profiles 1 to 12.

Standard Recording

The standard recording resolution can be selected from the high, medium or low options. When selected this will be reflected on the Standard Record Schedule screen.

Alias

This allows the alias High, Medium and Low settings to be configured in line with the selected recording resolutions, these are also used for viewing. When the alias is highlighted the screen will display which of the JPEG profiles the alias is used in and therefore will affect.

Resolution

This identifies the resolution for the alias being configured, the options are: 176x128, 352x256, 704x256 or 704x512.

Size

This is the image size for the alias being configured and can be set from 5KB to 45KB.

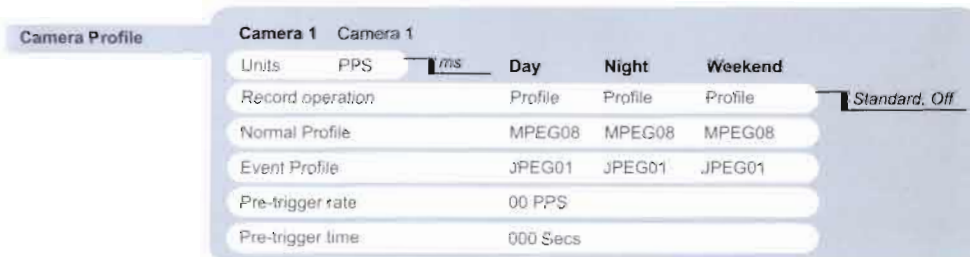
TIP: The resolution and size settings should be tested to ensure the most appropriate recordings are produced which fit the customer and storage requirements for the system.

Camera Profile Selector

This is a new page and is part of the **MultiMode** functionality.

The camera profile selector screen allows the normal and event profiles to be configured for each individual camera on the unit.

Select the camera that is to be configured by pressing the corresponding camera button.



Units

The pre-trigger settings within this menu can be configured in either the number of Pictures Per Second or Milliseconds. Using the ⇐ move the cursor to the PPS option and use ↓ to select ms (milliseconds).

Note: The setting selected within this option is also reflected in the submenus within this option, i.e. Editing JPEG profiles.

Record Operation

This identifies the recording operation for the camera, the options are:

Profile - The camera will use selected profile settings for normal and event recording.

Standard - The camera will use the standard record settings as configured in the Standard Record Schedule page.

Off - The camera will not be recorded.

Note: When all three operating modes are enabled (Day, Night, Weekend) the record operation must be set for each mode.

Normal Profile

Note: This is only active when the Record Operation is set to Profile.

This identifies the recording profile for the unit in non-alarm (normal) mode. Use the ↑↓ keys to scroll through the available options, these are:

MPEG01 to MPEG12

JPEG01 to JPEG12

When this option is highlighted additional information will displayed on the screen and it is also possible to access the edit profile screen by pressing the PLAY button, *see below for more information.*

Note: If the unit is to be used for alarm recording only you will need to select a JPEG profile in the normal profile setting and set the pictures per second of that profile to 0PPS. MPEG allows the PPS to be set between 1 to 25PPS (30PPS NTSC).

Event Profile

Select the profile recording that is to be applied when the unit switches to event recording mode, again the options available are:

MPEG01 to MPEG12

JPEG01 to JPEG12

When this option is highlighted additional information will displayed on the screen and it is also possible to access the edit profile screen by pressing the PLAY button, *see below for more information.*

Pre-trigger rate

This determines the rate the images will be continuously recorded into the pre-alarm memory and are available for enhanced pre-alarm recording. Select a record rate in PPS (or ms) to be recorded on the camera being configured.

Pre-trigger time

This identifies the period prior to the trigger that images will be stored providing pre-alarm recording to allow an Operator to view the lead up to the incident.

Profile Description

This information is displayed when one of the profiles is highlighted and details the description allocated to the highlighted profile.

Profile Parameters

This information is displayed when one of the profiles is highlighted. The information displayed details the image resolution, record rate and the file size (or bit rate / quality for MPEG) allocated to the highlighted profile.

Editing Profile Parameters

It is possible to edit each of the selected profiles, highlight the profile and press the PLAY button to display the relevant Profile Parameters page.

JPEG Profile Parameters



Units

The Units option can be set to pictures per second or millisecond.

Profile

This identifies the profile that is being configured and can not be selected.

Description

It is possible to allocate a description to each of the profiles to allow the Operator to easily identify the selected profile, use information that is relevant to the settings.

Resolution

The resolution can be select from High, Medium or Low. The corresponding resolution settings can be changed by selecting the Edit option, this will display the JPEG Image sizes screen.

Refer to Page 5 of this document for the JPEG Image Sizes screen.

Record rate

This identifies the record rate for the selected profile and can be from 00 PPS to 25PPS (PAL) or 30PPS (NTSC) (40ms PAL or 33ms NTSC). For record rates of less than 1PPS use the milliseconds option which allows settings of 1000ms to 99999ms. Selecting 00PPS will create a dummy profile that will not record. Use this dummy profile as a Normal Profile for event recording only.

MPEG Profile Parameters

Profile

This identifies the profile that is being configured and can not be changed

Description

It is possible to allocate a description to each of the profiles to allow the Operator to easily identify the selected profile, use information that is relevant to the settings.

Image size

This identifies the pre-configured image size for the MPEG profile being configured and can not be edited.

MPEG Quality

NOTE: It is recommended that this setting be left at the default Constant Bit Rate. Selecting any other setting is for specialist configuration and could result in high bit rate throughput which would require high storage requirements or low quality recorded images and should be carefully configured and tested.

Select the MPEG quality that will be associated with this profile, the options are:

Constant Bit Rate (default) - Recommended. Sets the recording bit rate to a constant making the record duration predictable.

High 02 - High 12 - High quality settings providing high quality recorded images but would also produce larger storage requirements.

Medium 13 - Medium 22 - Medium quality images with average storage requirements.

Low 23 - Low 32 - Lower quality images but reduces the data and therefore the storage requirements.

MPEG Bitrate

This option is active when Constant Bit Rate is selected in the MPEG Quality option. Set the bit rate in Kbits/s, this can be from 8Kbits/s to 8192Kbits/s.

Record Rate

This identifies the record rate for the selected profile and can be from 01 PPS to 25PPS (30PPS NTSC).

I-frame Interval

MPEG-4 compression uses I and P frames, the I frame is a full frame image from the video source, this option allows the Administrator to determine how often the I frame will be recorded within the selected profile.

Variable Recording Schedule - Digital Sprite 2 Setup Guide (MI-I-DS2AD/M1-0) Page 23

As part of the continuous improvements the New Digital Sprite 2 now supports **MultiMode** recording. This enhanced feature has replaced Variable Record Schedule.

Network Options - More Network Options - Digital Sprite 2 Setup Guide (MI-I-DS2AD/M1-0) Page 24

The More Network Options menu now includes the option to set the Viewing Resolution for remote monitoring of the system over the network.

Viewing Resolutions

Network Viewing Resolution	MPEG	JPEG
Standard recording		High
High Viewing	MPEG 12	704x256 25KB
Medium Viewing	MPEG 05	352x256 18KB
Low Viewing	MPEG 08	352x256 08KB
Description:	2CIF MED	
Parameters:	704x256 0090Kb/s 02PPS	

Standard Recording

This shows the system standard recording format as previously configured, this option is read only and can not be edited.

High Viewing

Select from the list the MPEG viewing profile when the High option is selected in either the NetVu ObserVer software or on the Live viewing page. Alongside the profile the associated image resolution and file size for JPEG viewing will be displayed, these cannot be edited in this menu, this is changed in the JPEG Image Size menu.

When this option is highlighted additional information will be displayed on the screen, i.e. Description and Parameters, see below for details.

Medium Viewing

Select from the list the MPEG viewing profile when the Medium option is selected in either the NetVu ObserVer software or on the Live viewing page.

Low Viewing

Select from the list the MPEG viewing profile when the Low option is selected in either the NetVu ObserVer software or on the Live viewing page.

Description

This displays the description of the MPEG profile as previously configured.

Parameters

These are the parameters for the highlighted MPEG profile, the example shows that the image resolution for MPEG 12.

PPP Selection - *Digital Sprite 2 Setup Guide (MI-I-DS2AD/M1-0) Page 25*

The PPP Selection menu has been re-designed as shown. The Base IP address identifies the PPP IP address and is configurable. The outgoing address takes the base IP address, the incoming is the next consecutive address from the base IP address (by default base and outgoing 10.0.0.1, incoming 10.0.0.2).

PPP Selection	Base PPP IP address	010.001.001.001	Disabled, Enabled
	Outgoing IP address	10.0.0.1	
	Incoming IP address	10.0.0.2	
	PPP idle line timeout	180 Seconds	000 - 500 Seconds
	PPP link down timer	02 Minutes	00 - 60 Minutes

Alarm Options - *Digital Sprite 2 Setup Guide (MI-I-DS2AD/M1-0) Page 27*

The Digital Sprite 2 supports Advanced Alarms; this feature has been added to the Alarm Options menu and when enabled has the following configuration parameters.

Alarm Options	Protect alarm images	Set period	000days	Set period, Indefinitely
	Main alarm display	Sequence	Alarm	
	Spot alarm display	Last	Both	
	Alarm buzzer	No		No, Yes
	Camera fail buzzer	No		No, Yes
	Relays	Edit		
	Advanced alarms	Enabled	Edit	
	Alarm zone config	Edit		
	General contacts	Edit		

Relays - *Digital Sprite 2 Setup Guide (MI-I-DS2AD/M1-0) Page 28*

The Digital Sprite 2 supports additional relay functions that are part of the Advanced Alarms feature (Advanced Alarms must be enabled for the additional relay functions to be active). This option allows any of the on-board relays or the additional relay modules to be configured to automatically trigger when the unit, switches out of Day operating mode; if the primary signal fails and notification of the unit being in Weekend mode.

Relay Setup	Event	Relay Type	Relay	Options
	Global alarm	Aux	Relay 1	Aux, Module 1, Module 2, None
	Global VMD	Aux	Relay 2	Aux, Module 1, Module 2, None
	Global camera fail	Aux	Relay 3	Aux, Module 1, Module 2, None
	Schedule notification	Aux	Relay 4	Aux, Module 1, Module 2, None
	Primary signal failure	Aux	Relay 5	Aux, Module 1, Module 2, None
	Weekend notification	Aux	Relay 6	Aux, Module 1, Module 2, None
	Relay test	Edit		

Use the ⇌ to move to the input selection option. Using the ↑ ↓ select if the relay is one of the on-board relay connectors (AUX) or on one of the additional relay modules (Module 1 or Module 2) that can be connected to the 485-bus.

There are six on-board relays, if Aux is selected choose which relay contact will be used, select from relay 1 to 6. If Module (1 or 2) is selected it is possible to select from sixteen relay contacts.

Schedule notification

The Digital Sprite 2 can identify a switch between operating modes (Day, Night, and Weekend). The schedule notification relay is closed when the unit is switched out of Day operation mode. Any of the AUX relays or the additional relay modules can be selected.

Primary Signal Failure

The Digital Sprite 2 can be configured to transmit alarm notification to a remote monitoring station. This notification normally will go via the primary route as configured. If for any reason this fails it is possible to configure the unit to automatically trigger this relay to give notification of this failure. Any of the AUX relays or the additional relay modules can be selected.

Weekend Notification

This option allows the Digital Sprite 2 to notify the Operator that the unit has been switched into weekend operation mode by automatically closing the relay output when this occurs. Any of the AUX relays or the additional relay modules can be selected.

It is possible to check the status of the relays once configured by using the Relay Test menu.

Advanced Alarms

The Advanced Alarms configuration settings have been added to the Alarm Options menu.

Note: This feature is disabled by default. Once enabled, the time parameters for Alarm Entry Timer, Alarm Exit Timer, additional relay functions and the ability to force the unit into Day, Night or Weekend modes become available.

Advanced Alarms	Parameter	Value	Options
	Alarm entry timer	030 secs	000 - 999 seconds
	Alarm exit timer	030 secs	000 - 999 seconds
	Forced Day	Disabled	Disabled, Enabled
	Forced Night	Disabled	Disabled, Enabled
	Forced Weekend	Disabled	Disabled, Enabled

Alarm Entry Timer

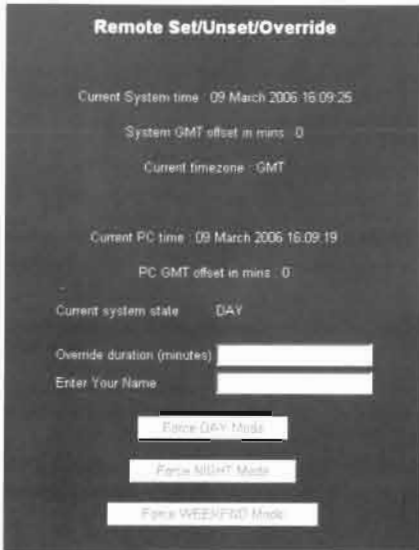
The alarm entry timer is the time interval between an entry initiator being activated and alarms being triggered. This timer will allow a key holder to enter the premises and have sufficient time to disable the alarm system without triggering an alarm. This is set in seconds.

Alarm Exit Timer

The exit timer is the time allocated to allow the key holder time to leave the premises once the keyswitch has been activated, if the alarm system detects a presence after the exit timer elapses then alarms will be triggered.

Forced Day, Night and Weekend

The Digital Sprite 2 supports three operating modes which by default are set as Day, Night and Weekend. Each operating mode can be configured with different recording and alarm settings. This option enables the 'Force' buttons on the Digital Sprite 2 web interface to be active allowing a remote user to access the unit via the web pages and force the unit into another operating mode for a set time period:



To force the unit into one of the operating modes access the unit using the web interface and select *System -> Remote Set/Unset/Override* the above screen will be displayed.

Enter the override duration and the Operator name which will be logged in the database. Press the operating mode option that the unit is to switch to.

Alarm Zone Config - Zone Settings - Digital Sprite 2 Setup Guide (MI-I-DS2AD/M1-0) Page 29

The Alarm Inputs have been enhanced to include new inputs for triggering an event on the system. The Alarm Input, Zone OR Input, Zone AND Input and Zone NOT Inputs have the following new options.

Keywords - This allows keywords configured as an event trigger for a camera in the Text Insertion Setup menu to be used as a zone trigger. Select the Keyword option and then scroll through the camera input list for the required camera.

System - Disk Fault - The Digital Sprite 2 can identify if there is a disk failure and can be configured to use the disk fault notification as a zone trigger. The Digital Sprite 2 will carry out a system check on the hard disk every 5 minutes, if the hard disk has failed this will be identified during this system check.

System - Fault Archive - The Digital Sprite 2 supports the option to automatically archive images from the hard drive of the unit to either the internal CD/DVD writer or to an FTP server, if for any reason this automatic archive process fails the unit can be configured to use failure notification as a zone trigger.

System - Slow Archive - This can be used in conjunction with continuous FTP archiving and will identify when the archive process of the system is slow. This can then be configured as an alarm trigger and will ensure that recorded images are not overwritten before being archived.

Zone Actions - Digital Sprite 2 Setup Guide (MI-I-DS2AD/M1-0) Page 31

The Zone Actions page has been updated to include parameters that can be configured as part of the Advanced Alarms features now supported on the Digital Sprite 2.

Note: The other options have been distributed over the other two pages of actions.

Zone 01 Actions	Page	Page 1	
Zone on entry route	Enabled	Enabled	Enabled, Disabled
Zone on exit route	Disabled	Disabled	Disabled, Enabled
Entry initiator	Disabled	Disabled	Disabled, Enabled
Exit terminator	Disabled	Disabled	Disabled, Enabled
Text only Alarm	Disabled	Disabled	Disabled, Enabled

Zone on Entry Route

This is part of the Advanced Alarms Feature and will create deferred alarms while the entry time is active.

There will be specific alarm areas associated with the entry route, if someone enters the specified alarm areas during the

entry count down process the alarm will not be triggered allowing the operator to reach the keyswitch to switch the system into an operating mode where the deferred alarms are disabled. Diverting from the entry route during the count down will result in the alarm being triggered immediately.

Zone on Exit Route

This feature is similar to a zone on entry route option, but works in the reverse, this allocates an exit route from the keyswitch to the exit allowing an operator to enable the alarm system for the premises and allow them to pass through the specified alarm areas without triggering the alarm. Diversion from the exit route will result in an alarm being triggered immediately.

This feature is only available when Advanced Alarms are enabled.

Entry Initiator

This is part of the Advanced Alarms Feature. This is the count down timer that will automatically start when an entry initiator is triggered (e.g. front door) and works in conjunction with the entry route to ensure the alarm system is not activated by other alarm triggers on the entry route for this set time.

Exit Terminator

Once the keyswitch is switched on the alarm system will wait for the exit timer to expire to ensure everyone has exited the building via the exit routes. This timer can be terminated earlier by triggering an exit terminator, e.g. closing the front door

General Contacts - Digital Sprite 2 Setup Guide (MI-I-DS2AD/M1-0) Page 33

The General Contacts page has been updated to include parameters that can be configured as part of the Advanced Alarms feature now supported on the Digital Sprite 2.



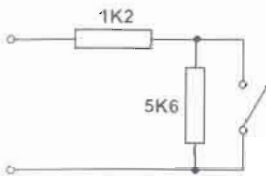
End Of Line

The End Of Line (EOL) option enables the inputs to detect any changes in the input electronic resistance. A change outside the expected values will result in a Tamper Alarm (short circuit or open circuit) being detected as well as the system switching to alarm mode. By default the EOL contacts are disabled for each input.

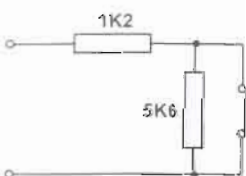
End Of Line Circuitry

The following describes the EOL tamper alarms circuitry needed when EOL has been configured. There should be two resistive values within the tamper alarm circuitry. These must be located inside the alarm device (furthest point from the Digital Sprite 2).

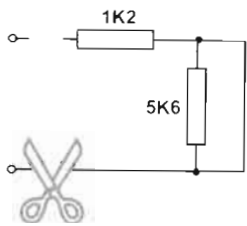
The alarm state could be Normally Open or Normally closed however the tamper states are the same for both settings.



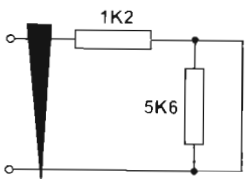
Open, the resistive value is 6.8K ohms (1.2K + 5.6K).



Closed, the resistive value is 1.2K ohms, as the circuit does not see the 5.6K ohm resistor



Open Circuit Tamper, the resistive value is infinity as the circuit has been cut and therefore is 'open'.



Short Circuit Tamper, the resistive value is 0 Ohms.

Nuisance count

This is a repetitive detector value. When an alarm is received on the unit it will store the alarm time and will monitor the number of times the same detector is triggered within an hour period. If the detector is triggered the number of times that has been set for the nuisance count then the unit will de-activate this detector from triggering an alarm on the system for an hour.

The unit will continue to monitor the detector and check how many times it is triggered during this hour, if it is triggered the same number as the nuisance counter it will remain de-activated for another hour, this will continue until the trigger value goes below the nuisance count setting.

Stuck time

If any of the alarms/detectors are active for a period longer than specified in the stuck time setting then these detectors will automatically be omitted.

VMD Options - Digital Sprite 2 Setup Guide (MI-I-DS2AD/M1-0) Page 33

The name of this page has changed to Activity Options.

Cell Display

This option has been enhanced to allow Activity and VMD cells to be selected for display.

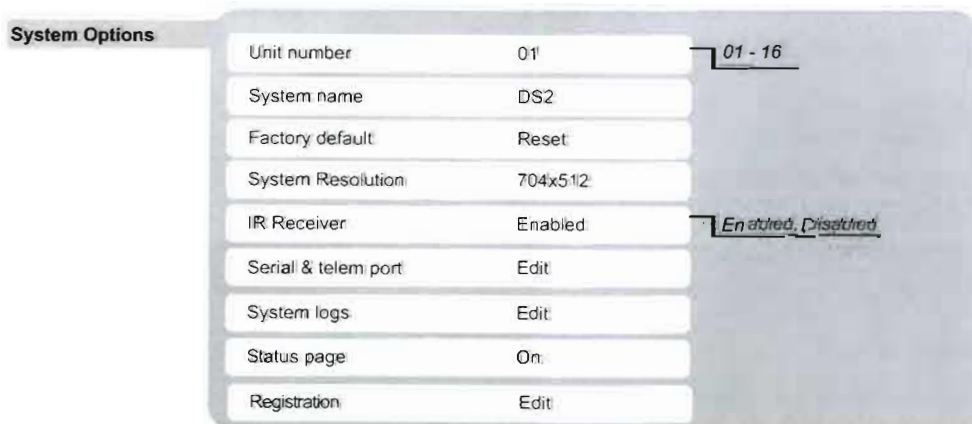
The options are: Activity, VMD or Both activity and VMD cells on the main monitor (Mon A).

Display Options - Digital Sprite 2 Setup Guide (MI-I-DS2AD/M1-0) Page 34

The Multiscreen Interlace parameter can be used to eliminate flicker on a multiscreen display..

System Options - Digital Sprite 2 Setup Guide (MI-I-DS2AD/M1-0) Page 37

This menu has been updated and now includes a system resolution and registration option.



System Resolution

This is the fundamental resolution for the system and will be used as the basis of all the configurable resolution parameters described in this document.

The supported system resolutions are: 640x512, 704x512, 704x576, 720x512 720x576(PAL) or 640x480, 704x480, 704x544, 720x480 720x544(NTSC).

Audio

This option has been moved to the Record Options menu.

Registration

A registration parameter has been included in the System Options menu. This will only be displayed if enabled within the Advanced Features web page.

Note: The registration parameter is configured prior at the factory prior to the unit being shipped, it is recommended that this be disabled in the web pages to ensure accidental changes can not be made.

Record Options - Digital Sprite 2 Setup Guide (MI-I-DS2AD/M1-0) Page 40

The archive function on the system has been enhanced to include the option to select continuous archive allowing images to be continuously archived to an FTP server.

Automatic Archiving - FTP

Download options

When FTP is selected in the Event Destination parameter an additional option is included in the download options allowing continuous archiving to be selected. This will result in the Digital Sprite 2 making a connection to the FTP server (configured in the FTP Settings screen) and will continuously archive images from the hard drive of the unit to the FTP server.

FTP Continuous Archiving		
Forced archive	010 Minutes	
Warn threshold	030%	
Start date	No change	
Archive date	18:37 09/03/2006	100%

Forced archive

If a system policy is in place it may be necessary to archive any recorded images within a set time, the forced archive option can be configured to ensure the recordings are archived within this specified time period.

Note: If the forced archive time occurs before the recorded files complete a video partition (50MB file) then this partition will be closed and archived.

Warn threshold

It is possible to set a threshold on the unit so that if the archive process is slower than the recording rate the unit can identify when the selected percentage (example is set to 30%) of hard disk space that is not waiting to be archived remains before the un-archived images will be overwritten. This will allow the Operator to either slow the record rate down or review the speed of the archive process.

Start Date

There are two options.

Start at - This allows the time and date to be configured. It is possible to start the archive process in the future stating all recordings after this date will be archived, or in the past to ensure previous recorded images plus all new recordings are archived.

No change - This will leave the date as previously configured (or from when the Continuous Archive option was enabled).

Archive Date

This is a read only setting and shows the time and date of the last archive session and identifies what the percentage of recorded images are left to be archived i.e. 100% means the archive process hasn't begun and there is still 100% of recorded images to be archived.

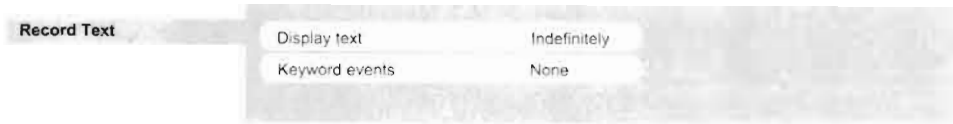
This percentage will be used in conjunction with the warn threshold, as the percentage drops (as files are archived) the unit will monitor and will trigger an event when the percentage drops below the specified threshold.

Local 4CIF Interlace

The parameter 'Local 4CIF Interlace' has been added to this menu. This can be switched on if the system will be used to record using the 4CIF settings, and will eliminate the comb effect that may be visible in a high motion recording environment. It is not required if not using 4CIF, and may not be required if not recording high motion.

Record Text in Image - *Digital Sprite 2 Setup Guide (MI-I-DS2AD/M1-0) Page 45*

The record text in image when enabled has an Edit option to display the submenu for record text configuration.



Display Text

The text displayed can be automatically removed from the screen after a user defined time or alternatively the text shall remain on the screen indefinitely (default). Select the number of seconds up to 999 sec maximum.

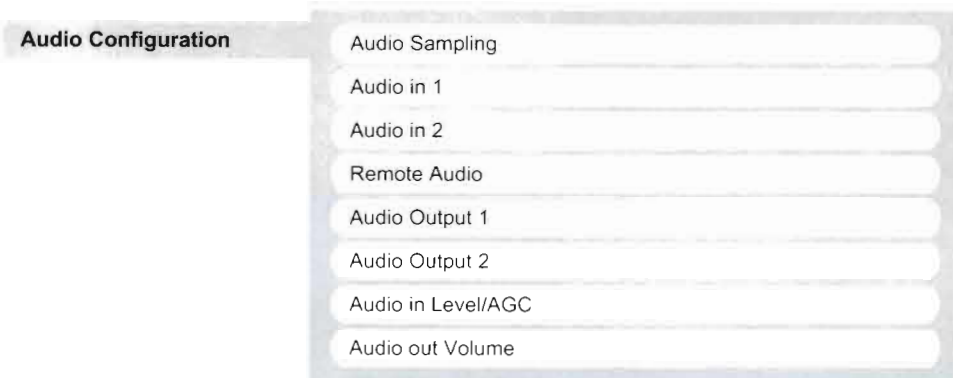
Keyword Events

When this option is selected to All cameras the unit will add a keyword event trigger to the event database for every matching word. This can then be accessed via Event Log (press the Event key on the unit). A Keyword (K) event entry will be displayed as well as the corresponding Zone events, the K entry will detail the keyword that caused the event.

If this option is set to None then the keyword will still be available as triggers for Zone events.

Record Audio

This option has been moved from System Options to this screen. The configuration has been enhanced from what was detailed on Page 37 of the Digital Sprite 2 Setup Guide MI-I-DS2AD/M1-0.



Selecting Edit next to the Record Options menu entry will open the Audio Configuration menu.

Three channels of audio are recorded on the Digital Sprite 2; there is a choice of two local audio channels and a single remote channel. This menu will enable or disable audio recording.

The options are:

- **Audio Sampling** - Audio can be recorded at 8Hz, 16Hz or 22Hz.
 - **Audio in 1 & Audio in 2** - Enable this when recording through the audio input. Audio 1 is associated with Camera 1, Audio 2 is associated with Camera 2.
 - **Remote Audio** - Enable this to record the Line In connection
 - **Audio Output 1** - Enable this to be able to send audio signals out of the unit via Output 1 (typically used to send audio to a remote speaker).
 - **Audio Output 2** - Enable this to output the audio from the camera being viewed, either Camera 1 or Camera 2 (typically used as a control room monitor)
 - **Audio in Level/AGC**- This option allows the Audio in level to be set, between 0 and 15. This is the base setting from which the Automatic Gain Control (AGC) will operate.
 - **Audio out 1 Volume** - This setting controls the level at which audio is sent via the Line Out connection.
- Note:** *These changes are also reflected in the Web pages (System - Audio recording).*

Event Database

This option now allows you to view information on when the database was started and how many entries are currently stored.

It is no longer necessary to configure the number of entries. The option to change the number of entries has been removed from this menu page and the equivalent web configuration page.

Alarms and Presets - Digital Sprite 2 Setup Guide (MI-I-DS2AD/M1-0) Page 45

The alarm and preset option now supports the ability to select the Direct connector within the Module/Aux option.

Text Insertion Setup - Digital Sprite 2 Setup Guide (MI-I-DS2AD/M1-0) Page 45

The text Insertion Setup menu has been enhanced to include more features for recording text with associated video recordings.

Text Insertion Setup		Camera 01
Port assignment	Off	Network 07000, Serial 2 Edit, Serial 4, Edit
Text filter	Plain text	Epson, Laserjet, DM POS Receipt, DM POS Journal, TVC-1066, RAW
Number of lines	20	00 - 20
Width of lines	50	01 - 50
Text colour	White	Black, White, Yellow, Magenta, Red, Cyan, Green
Text background	Off	Off, White, Black
Minimum text display	Half screen	Two thirds, Full, Quarter, Third screen
Event trigger	None	Any text, Keyword Edit
Post text event extension	000 secs	000 - 999

Port Assignment

It is possible to select any of the serial ports on the unit (ensure these are enabled for Text in Image in the System Options - > Serial & Telemetry Ports menu) or connect to the network. The Digital Sprite 2 will then record this text along with associated video. This function is used to assign a 'port' on the digital recorder for a text source. When a Serial port is selected use the key to move to the Edit Serial & Telemetry Ports menu (refer to Setup Guide).

Text Filter

The text filter is used to remove certain characters or format the text in a specific way. The text filter options are as follows:

Option	Action
RAW	Minimal filtering, text is displayed as it comes in with the exception of Carriage Return characters that force a new line.
Plain text (default)	Like RAW text, but acts upon carriage returns, line feeds, and converts TAB characters into spaces.
EPSON	Mimics an EPSON printer
Laserjet	Mimics a HP Laserjet printer
DM POS Receipt	Use this option when using Dedicated Micros POS Interface Unit in receipt mode.
DM POS Journal	Use this option when using Dedicated Micros POS Interface Unit in Journal mode.
TVC-1066	Use this option when using TVS TVC-1066 text converter box.

Min Text Display

This allows the text display on the selected camera to be setup for viewing in full, quad or multiscreen display. This ensures that if the selected camera is being viewed in any of the selected screen formats then the text data will be available for viewing, but for smaller segments text will be disabled for clarity.

Display Option	Remarks
Off	This will remove the text from being displayed on the selected camera
Full	Display text data on the selected camera when displayed in full screen only
2/3	Display text data on the selected camera: When selected in the main quadrant (only) of 6 Way multiscreen Displayed in full screen
Half	Display text data on the selected camera. When displayed in any quadrant in Quad screen When selected in either of the two main quadrants (only) of the 10 way multiscreen When selected in the main quadrant (only) of 6 Way multiscreen When selected in the main quadrant (only) of 13 Way multiscreen Displayed in full screen

Display Option	Remarks
1/3	Display text data on the selected camera When displayed in any segment of the 9 Way mutliscreen When displayed in any quadrant in Quad screen When selected in either of the two main quadrants (only) of the 10 way multiscreen When selected in the main quadrant (only) of 6 Way multiscreen When selected in the main quadrant (only) of 13 Way multiscreen Displayed in full screen
1/4	Display text data on the selected camera at all times in all segments:

Note: This setting is for viewing only and does not affect the recorded text.

Event Trigger

The text on each camera input can be used to generate an event (alarm). This can be generated by receiving any text characters, or specific keywords that have been entered as seen below. Triggered text events can be listed in the Event Log as though they are alarms or activity detection. The default setting is for no event triggering.

The system can have up to 32 user defined keywords, each camera can use any keyword to trigger an event. Each keyword can have a maximum of 20 characters.

Enable the Event Trigger option and select Edit, this will display the Keyword menu.

The screenshot shows a 'Keyword' menu with a list of keywords. The first keyword is 'Page 1', which is selected. To its right, there are buttons for 'Page 2, Page 3, Page 4'. Below the list, there are three rows of input fields. The first row is for keyword '1', the second for '2', and the third for '8'. Each row has an 'Event' checkbox and a 'Value' text input field.

Select the keyword number (1 to 32) and enable the Event option if the keyword is to trigger an event. Moving the cursor to the Value option will display the Keyword Edit menu.

The screenshot shows the 'Keyword Edit' menu for 'Keyword 01'. It has a 'Value' text input field with 'Void' entered. Below it, there is a 'Keyword Use' section with two radio buttons: 'All cameras' and 'Selected cameras'. The 'Selected cameras' option is selected.

Enter the keyword and to include camera inputs select either all cameras or individual camera by pressing the corresponding camera button.

It is possible to use wildcards to replace characters in words:

A question mark (?) will be replaced by any single character when used to search for text. For example, S?LE will trigger an event for words such as SALE, SILE, SOLE etc.

An asterisk (*) will be replaced with any number of characters multiple characters when used to search for text. For example, S*LE will trigger an event for words such as SALE, SCALE, SIMPLE etc. To enable individual keywords, ensure the box at the end of the line is solid green.

Important note: Keywords that contain spaces, such as NO SALE must use the transparent character rather than the solid black character to signify the space. Otherwise it will not trigger an event.

Post Text Event Extension

When the system has been configured for event trigger on receipt of text or a keyword it is possible to define an extended time frame. This means that the event and any additional activity after the trigger will be captured and stored.

Note: Any other text events that are received in this time on this camera will be treated as a single event.

Configuring MultiMode Recording via the System Web Pages

The following details the configuration settings for **MultiMode** recording using the web interface. It is recommended that the following steps are used for configuration:

1. Check that connected cameras are enabled - *Cameras -> Camera and Record Setup*, note that the Digital Sprite 2 automatically detects cameras on power up.
2. Enable cameras for Standard or Profile Recording, or switch cameras Off for inputs that are not to be recorded - *Cameras -> Camera and Record Setup*.
3. Configure the standard recording parameters - *Cameras -> Camera and Record Setup*.
4. Use the Profile Wizard (Cameras - Profile Wizard) to configure the Profile recordings for the selected cameras - *Cameras -> Profile Wizard*.

Remember to Save Settings!!!

Notes on MultiMode Recording

Pre-Alarm Recording

If a unit is set up to record MPEG4 for normal recording and JPEG for Events, the pre-alarm image stored in RAM will be saved as JPEG at the same resolution as the Event images. If no changes are made to the standard configuration, the unit will still 'Plug and Play' at 2CIF resolution, JPEG Normal and Event recording at 6pps across all cameras, using Std rate recording.

JPEG vs MPEG recording

MPEG compression records the changes between the two sequential images (known as temporal redundancy) and then calculates the difference between two frames and supplies the information required to complete an image (called motion estimation). MPEG uses I-frames (complete new image frames) at a user defined rate to allow easy verification. These two technologies combine to achieve a greater level of data compression than can be normally achieved with JPEG compression

The user must appreciate the difference between the quality definitions used within this section.

Each camera must use either Std Recording or Profile recording for each part of the schedule, Day, Night and Weekend. Cameras using the Std recording setting will use the same, common setting which is defined at the top of the first page.

Profile definitions are editable by the user, up to 12 JPEG and 12 MPEG user defined specifications can be saved and used within the Camera Setup.

To set up MultiMode recording:

Select *Cameras -> Camera Setup* to open the main Camera Setup page.

This page displays the current camera settings for the unit.

It is possible to measure recording by either milliseconds or pictures per second, using the selection options at the top of the page. The standard recording resolution and file size can be set using the drop down menu.

The estimated projected recording capability of the unit is shown, based on the parameters entered in the Standard and Alarm Record Rate boxes, combined with the Std Recording image size information. This does not consider the actual schedule times or the time in Event. Changing any one of these parameters will change the projected recording duration.

It is possible to interleave record a camera in Alarm mode with the other cameras, or to record the Alarm camera exclusively, using the Alarm Record Mode drop down menu. The table at the bottom of the page shows the profile for each connected camera.

It is possible to:

- Edit the name of each camera to something more appropriate to its location.

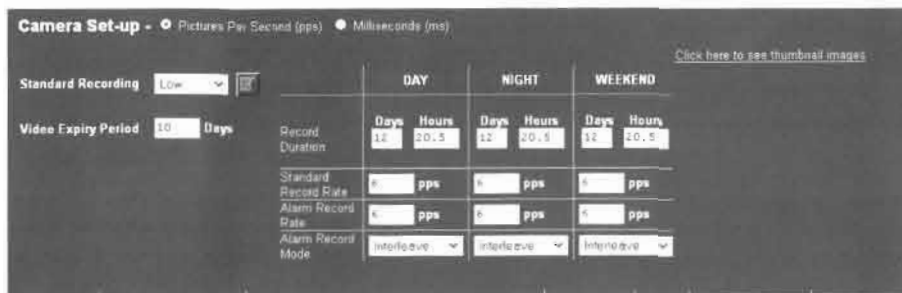
- Select the recording profile for each Day, Night or Weekend mode.

- Terminate a camera that will not be looped through to another application.

- Select whether a camera has a mono feed.

- Dictate the telemetry protocol to be used.

- Select whether the camera will generate a report on fail.



Function

Description

PPS / ms

This allows the record settings to be configured as either Pictures Per Second or Milliseconds.

Standard Recording

This is the resolution and image size of the images that will recorded to hard disk for the cameras that are selected for standard recording and are edited in the profile setup page. The options are High, Medium or Low.

Video Expiry Period

This indicates the maximum time any images can be viewed from on the hard disk, if the record duration is less than the video expiry period the images will automatically be overwritten earlier

Record Duration

The total record time available in Days and Hours. This indicates the storage capacity of the system without any alarm recording. It is estimated from size of video storage, the standard record rate and the requested target size of the recorded images.

Note: Changing the Record Duration will automatically update the Standard Record Rate. Changing the Standard Record Rate will likewise update the Record Rate. This should be configured for day, night and weekend operation modes.

Standard record rate

This is global setting and identifies the 'common pictures per second' for all enabled video inputs on the unit in the mode of operation that is being configured. This will remain unless otherwise actioned (Event). This can be set in milliseconds or the number of pictures per second.

The delay between consecutive images from any one camera is the Standard Record Rate multiplied by the number of cameras being recorded. Changing the Standard Record Rate will automatically update the Record Duration. Changing the Record Duration will likewise change the Standard Record Rate.

Alarm record rate

This identifies the global alarm recording rate, for the mode of operation being configured (i.e. Day, Night and Weekend mode), which will be activated if an alarm is triggered on the unit. For example, the unit may be configured to increase the recording rate when a door contact is triggered.

Alarm Record Mode

This option allows exclusive or interleave recording to be selected within any of the operating modes (Day, Night, Weekend) to adjust the record sequence when an alarm is received. The options for event recording are:

Unchanged – This sets the record sequence to remain the same whether an alarm is present or not.

Exclusive – The unit will only record the alarm cameras.

Interleaved – This will set the unit to record the alarm cameras more frequently than non-alarm cameras, by interleaving the two i.e. if camera 1 is in alarm the interleave recording would be 1213141516..

Connected

The Digital Sprite 2 can automatically detect if a camera source is present, the corresponding input will be enabled in this menu for connected cameras.

Title

It is possible to allocate an ASCII camera title to each of the enabled inputs, this along with the camera number will be displayed on the screen to identify the camera selected.

DAY, NIGHT, WEEKEND

These drop down boxes allow the selection of either Standard or Profile recording. Selecting Standard recording will apply the settings from the top of the page. Profile recording will be defined using the Profile Wizard.

Edit

This button opens a menu which displays the settings for the selected camera, and allows the definition of which Profile recording alias will be used. It will only be displayed if Profile has been selected as an option for the camera, and may not be visible until the settings for the camera have been saved.

Note: It is recommended that the Profile Wizard be used to configure the profile recording for cameras selected for profile recording.

Terminated

As the Digital Sprite 2 supports loop through it is necessary to remove the termination of any inputs that are 'looped', by default all inputs are terminated at 75 ohms.

Mono

If the video input on the Digital Sprite 2 has a black and white (monochrome) source connected then enable the corresponding camera. The Digital Sprite 2 will try and compress the colour contents of the image if this box is not enabled, ticking this box will remove unnecessary overhead on the compression process.

Function	Description
Telemetry	The Digital Sprite 2 supports a number of coaxial and serial protocols, this option allows one of these to be selected from the list and allocated to the corresponding camera input.
Cam-Fail reporting	If the video input on the Digital Sprite 2 does not identify a 1V peak-to-peak signal then the unit can transmit an alarm notification for camera failure on the corresponding video input.

Selecting Profiles

Note: It is recommended when configuring the record settings to use the Standard Record Schedule option or the **MultiMode** option but not a combination of the two. Standard Recording will divide the record settings across all inputs selected for recording, **MultiMode** allows the record settings for each camera to be individually configured

Once all the profiles have been setup to the operators satisfaction, the individual cameras can have those settings applied to them. Click *Camera Setup and Record Profiles*.



Each Camera can be instructed to use different recording modes depending on the time mode it is in. Select a suitable mode for each of the Day, Night and Weekend modes (either Std or Profile).



The first camera mode can be copied across all cameras. Press the Down icon to copy the mode to all cameras in the list. With Profile selected, choose the profile to be used. Click the edit button to select the profiles.



The Profile Selector window will open. Any time period previously designated as Profile recording will have a drop down box, to enable the selection of the configured profile. All of the Profile MPEG and Profile JPEG options will be listed in this dropdown.

Click on the Save button to apply these settings.

Alternatively the profiles for all cameras can be compared and set from the Camera Profiles webpage.

Camera Profile Wizard

It is possible to set the unit recording configuration based on the users priorities. Using the Configuration wizard, the Administrator can set the unit configuration according to the users priorities.

To use the Camera Profile Wizard:

Note: Ensure cameras have been selected for profile recording as detailed above.

1. Select *Cameras -> Profile Wizard*.

MPEG/JPEG Profile Configuration Wizard

How many days recording do you wish to store before the system starts overwriting?

What do you want to record the images in?

What is the number of estimated events per hour in standard recording mode?

1 Camera 1
Number of predicted 5 second events per hour?

	DAY	NIGHT
Record Quality	<input type="text" value="normal"/>	<input type="text" value="normal"/>
Record Rate	<input type="text" value="medium"/>	<input type="text" value="medium"/>

2 Camera 2
Use the settings from:

3 Camera 3
Use the settings from:

4 Camera 4
Use the settings from:

5 Camera 5
Use the settings from:

2. Input the number of days that images should be stored by the system before being overwritten. This will influence the quality and rate of images being stored.

3. Use the selector button to determine if the images are to be stored as MPEG or JPEG.

4. Input an estimate of the number of events that will be recorded during an hour in standard recording mode. Use the drop down boxes under the individual camera entry to input the quality of image and the recording rate required.

5. Any of the settings that are outside the parameters of the unit will be highlighted in red. Change to a lower setting until the highlighted field returns to white.

MPEG/JPEG Profile Configuration Wizard

How many days recording do you wish to store before the system starts overwriting?

What do you want to record the images in?

What is the number of estimated events per hour in standard recording mode?

6. Under each camera, input an estimate of the number of Events that will last more than five seconds that will have to be recorded. Use the drop down boxes under the camera entry to input the quality of image and the recording rate required for an Event.

1 Camera 1
Number of predicted 5 second events per hour?

Record the event images in?

	DAY	NIGHT
Record Quality	<input type="text" value="normal"/>	<input type="text" value="normal"/>
Record Rate	<input type="text" value="medium"/>	<input type="text" value="medium"/>
Event Quality	<input type="text" value="normal"/>	<input type="text" value="normal"/>
Event Rate	<input type="text" value="medium"/>	<input type="text" value="medium"/>

7. For ease of installation, settings can be copied from other configured cameras, using the drop down menu. Alternatively, individual settings can be added for each camera, using the process described above.

2 Camera 2
Use the settings from:

3 Camera 3
Use the settings from:

4 Camera 4
Use the settings from:

5 Camera 5
Use the settings from:

To define the recording profiles:

It is possible to manual configure the system without using the Profile Wizard, the following describes this process.

In the Camera Profiles menu select the Profile Setup option (at the top of the page) to access the configuration page. This will allow individual recording profiles to be defined.

Note: The Profile Setup menu can also be accessed by pressing the edit button adjacent to the Standard Recording drop down menu in the Camera and Recording Setup menu.



The following page will be displayed.

Profile Setup

System Resolution: 704x512

Resolution alias	Resolution	Size (KB)	View Profile	MPEG4 Profile
JPEG High	704x512	18	MPEG4 High	CIF_MED
JPEG Medium	704x256	12	MPEG4 Medium	2CIF_MED
JPEG Low	352x256	8	MPEG4 Low	4CIF_MED

MPEG4 Profiles

MPEG4 Profile Name	MPEG4 Bitrates (kb/sec)	MPEG4 Quality	MPEG4 Framerate(pps)	MPEG4 sec between 1 Frames
4CIF_HI	1024	CBR	4	1
4CIF_MED	256	CBR	2	4
4CIF_LO	176	CBR	4	0
2CIF_HI	512	CBR	4	1
2CIF_MED	96	CBR	2	4
2CIF_LO	72	CBR	2	0
1CIF_HI	256	CBR	4	1
1CIF_MED	48	CBR	2	4
1CIF_LO	16	CBR	1	0
QCIF_HI	64	CBR	4	1
QCIF_MED	32	CBR	2	4
QCIF_LO	8	CBR	1	0

JPEG Profiles - Pictures Per Second (pps) / Mikiseconds (ms)

Profile name	Record Rate	Resolution code
1 JPE001	1	High
2 JPE002	2	High
3 JPE003	3	High
4 JPE004	4	High
5 JPE005	5	High
6 JPE006	6	High
7 JPE007	7	High
8 JPE008	8	High
9 JPE009	9	High
10 JPE010	10	High
11 JPE011	11	High
12 JPE012	12	High

[Return to Previous page](#)

Function

System Resolution

Description

Specifies the fundamental resolution that the unit uses for local live viewing and as a basis for record resolution.

Resolution alias

Combines a resolution with a file size to define a resolution code (High, Medium, Low) used in the JPEG Profiles. Used when cameras or recorded images are being viewed using the JPEG settings via NetVu associated applications.

Resolution

Defines the screen resolution will be used by each Resolution Alias.

Size

Defines the image file size that will be used by each Resolution alias.

View Profile

Used to set the resolution settings when cameras or recorded images are being viewed using the MPEG settings through NetVu associated applications.

MPEG4 Profile

Specifies which MPEG profile is associated with which View profile. These are defined in the table 'MPEG4 Profiles' further down the page.

All camera recording parameters for the unit are defined on this page. The user should have an understanding of what settings are required to suit the application. Setting the recording parameters to a very low setting will result in a higher recording and storage capability, but will reduce the quality of the images being stored. Recording at a high resolution and a high rate of pictures per second will give a high quality image, but will result in the unprotected images being overwritten frequently.

System Resolution 704x512

System resolution, displayed at the top of the page defines the resolution that the unit uses for viewing and recording as standard. It should be left at 704x512 for PAL systems.

Resolution alias	Resolution	Size (KB)
JPEG High	704 x 512	24
JPEG Medium	704 x 256	18
JPEG Low	352 x 256	8

This dialogue box at the top of the page sets the resolutions that will be used when cameras or recorded images are being viewed using the JPEG settings via NetVu associated applications. These settings are used in the JPEG Profile table at the bottom of the page.

View Profile	MPEG4 Profile
MPEG4 High	2CIF_MED
MPEG4 Medium	2CIF_MED
MPEG4 Low	CIF_MED

This dialogue box at the top of the page is used to set the profile settings when cameras or recorded images are being viewed using the MPEG settings through NetVu associated applications. They equate to MPEG parameters set in the table immediately below.

MPEG4 Profile Name	MPEG4 Bitrates (Kb/sec)	MPEG4 Quality	MPEG4 Framerate(pps)	MPEG4 sec between I-Frames
HCFP_HI	1024	CBR	5	2
HCFP_MED	512	CBR	5	4
HCFP_LO	170	CBR	5	8
2CIF_HI	512	CBR	5	2
2CIF_MED	256	CBR	5	4
2CIF_LO	85	CBR	5	8
CIF_HI	256	CBR	5	2
CIF_MED	128	CBR	5	4
CIF_LO	43	CBR	5	8
QCIF_HI	64	CBR	5	2
QCIF_MED	32	CBR	5	4
QCIF_LO	11	CBR	5	8

Function	Description
MPEG4 Profile Name	This is a user defined description that identifies a particular set of parameters.
MPEG4 Bitrates (Kb/sec)	This parameter designates the rate at which data will be transferred or recorded.
MPEG Quality	This parameter defines whether the bandwidth allocation will be a set figure (Constant Bit Rate) or will fluctuate depending on the quality of the image being recorded. Select a suitable level of detail from the drop down list. If a setting other than CBR is used, the bit rate column is not available. Use a constant bit rate to accurately predict hard drive capacity.
MPEG4 Framerate (pps)	This sets the number of frames captured per second under this setting.
MPEG4 sec between I-Frames	MPEG technology uses Index frames (I-Frames) as reference images, and then records the differences between the subsequent images. This cuts down on the amount of data stored. This setting determines the frequency of individual I-Frames.

The lower table allows the operator to edit the Profile JPEG recording quality settings.

The default values on both give a broad range of standard settings but can be edited to a users precise requirements.

	Profile name	Record Rate	Resolution code
1	JPE001	1	High
2	JPE002	1	High
3	JPE003	1	High
4	JPE004	4	High
5	JPE005	1	High
6	JPE006	1	High
7	JPE007	1	High
8	JPE008	1	High
9	JPE009	1	High
10	JPE010	1	High
11	JPE011	1	High
12	JPE012	1	High

Function

Description

Profile Name

This field can be edited to something significant for the Administrator.

Record Rate

This field either displays the pictures per second recorded under this setting, or the milliseconds between each picture, depending on the selection at the top of the table.

Resolution code

The drop down menu allows selection of a suitable resolution for this profile, from the settings at the top of the page (See JPEG Resolution Alias).

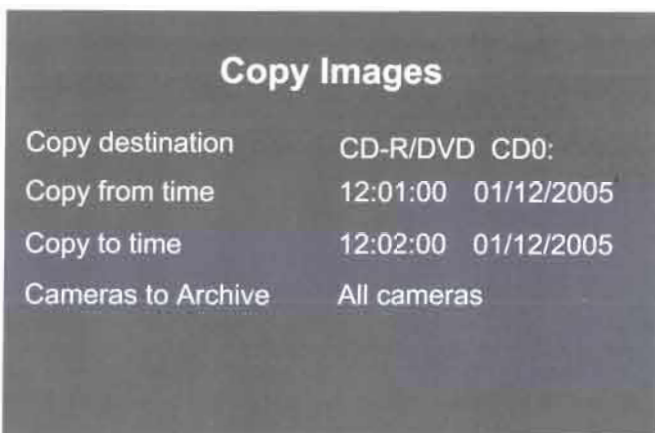
JPEG Profiles define a resolution code and a recording rate.

Press the Save icon to apply the settings.

Selective Archiving - New Feature

The New DS2 now supports the option to select which cameras within a set time are to be copied to the Archive List. This can be achieved within the Copy menu.

Press and Hold the Copy button on the front of the DS2, the following menu will be displayed.



Select the destination for archiving to be CD-R/DVD

Note: When FTP is selected the Cameras to archive option is not available.

Enter the start time and the end time.

Select either All cameras or Selected cameras. With Selected cameras use the camera buttons to include/exclude cameras from the option.

Press MENU/MODE to display the Disk Archive List

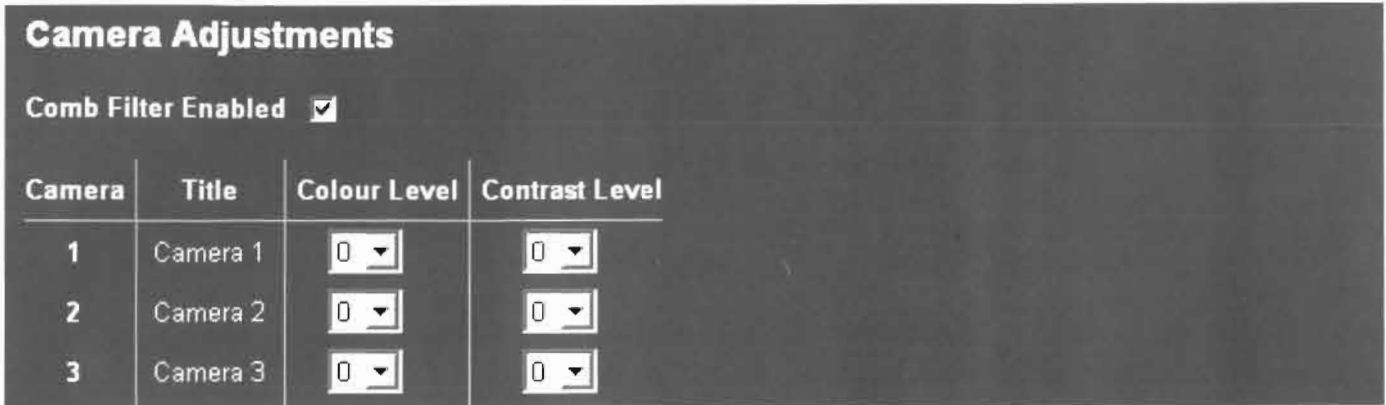
Highlight Add Next and press MENU to add the entry to the list.

Note: Using the Copy function during playback and selecting events from the Event List will continue to copy all cameras, to select specific cameras you must use the Copy menu.

Camera Adjustments

Comb Filter

The new "Comb Filter" feature improves image clarity and is turned on by default. Some NTSC line locked cameras may give better image quality results with the Comb Filter disabled.



VCL Dome Menus

The New Digital Sprite 2 has enhanced the integration with the VCL dome. This allows the dome menus to be easily accessed via the Digital Sprite 2 for configuration of Patrol and Mimic Patrol modes.

Note: A Dedicated Micros remote keyboard (KBS) will need to be connected to the Digital Sprite 2 to gain access and allow configuration of the VCL dome menus.

To access the VCL dome Patrol Menu, press and hold the Patrol key on the KBS keyboard.

The Patrol menu will be displayed. Use the joystick to navigate the menu.

1. Press the camera key to configure the corresponding patrol, i.e. Camera 2 will display VCL Patrol 2 configuration screen. Use cameras 1 to 4
2. Select the Preset required and enter the speed and dwell for each of the preset position.
3. Press camera key 5 to 8 to access Patrol 5 to 8 which allows mimic tours to be configured.

Note: Privacy Zones are reserved as Presets 100 to 127 on the VCL dome.

Notes for Existing DS2 Users

Network User Management

Earlier versions of the DS2 allowed network user accounts to be setup through the Network Viewer. The New Digital Sprite 2 offers more flexibility than previous versions of DS2 in setting up network user accounts by editing configuration files using a standard text editor.

Check the Networking Guide for details on how to setup user accounts.





