

Network Viewing Software User and Administrators Guide



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Introduction

Network Viewing Software is designed specifically for accessing video images across a network from a Dedicated Micros digital recorder. Network viewing software allows the user to:

- View high quality live images across the network in Full or Quad view.
- View recorded cameras across the network, with multi-speed fast forward and rewind, and go to time and date facilities.
- Copy still or moving images onto the user's computer.
- Control telemetry cameras.

The information contained in this user guide is based on Network Viewing Software version 2.2(002) and above. Note that not all features are available on all Dedicated Micros digital recorders and software versions. Please contact for local technical support department if you require any further information.

System requirements

The network viewing software requires a PC with the following system requirements:

- Minimum Intel Pentium 233MHz (500Mhz and above recommended).
- 32MB RAM (64MB and above recommended).
- Microsoft® Windows™ 95/98/Me/XP/NT/2000.
- 4MB graphics card (capable of 16 million colours at a minimum of 800x600 display).
- 5MB free hard disk space for software installation.
- 10-baseT network card for LAN operation or PSTN/ISDN modem for remote dial-up.

Important: Ensure you are logged on as an Administrator or Power user before installing the viewing software on a Windows XP or 2000 machine.

Connecting through a firewall.

To connect the digital recorder through a firewall, it may be necessary to open ports 8234 to 8239 on the UDP and TCP/IP channels of the firewall. The port can be changed by the administrator if multiple units need to be connected to the same ADSL line. See 'Changing the unit Remote Machine Port number' for details of how to do this.

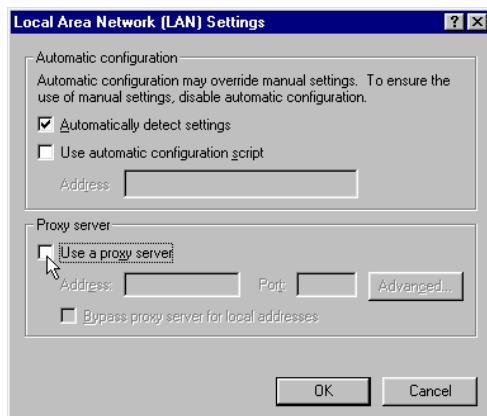
Connecting using a proxy server.

Viewing images on WebPages via a proxy server is supported for the Netscape Navigator browser but not for Internet Explorer.

If using Internet Explorer the proxy server setting should be turned off as follows

From the browser's dropdown menu select:

- Tools
- Internet Options
- Select the "Connection" tab,
- Press the "LAN Settings" button,
- Uncheck the "Use a proxy server" check-box as below.



Using Network viewing software

To run the Network Viewing Software:

Click on Start > (All) Programs > Network Viewer > Network viewer.

The network viewing software can be used to perform the following tasks:

- Display the software version.
- Connect to the digital recorder.
- View images in full and multiscreen views.
- View cameras in a maximised display.
- Change the image quality.
- Control telemetry cameras.
- Play back recorded images.
- View the event log.
- Copy single (JPEG) images locally.
- Copy multiple (AVI) images locally.
- Export images to the local PC.
- Administrator functions.

Displaying the software version

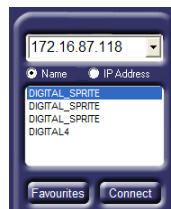
To display the software version of the network viewing software, double click on the logo in the top left-hand corner of the screen. When you are logged onto a unit it will also display the firmware version of the digital recorder.

Connecting to a digital recorder.

When the Network viewing software is opened, the program automatically detects all units on the local network. If a new unit is added, right click on the list and select Discover.

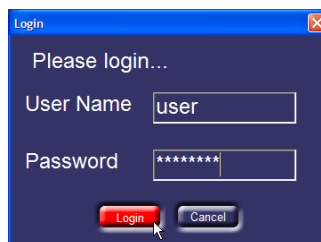
Note: Units on a different subnet or on a WAN will not be discovered, you will need to enter the IP address manually, or add it to the 'Favourites' list. To connect to a DM digital multiplex recorder:

1. Click on the name or IP address of the unit to be connected or type in the IP address of the unit in the dropdown list.



2. Click on the Connect button to display a login screen...

3. Enter a user name and passwords as required and click on Login or press 'enter'.



Default Passwords

The default username is **user** and password is **password**. The Administrator can be change this for each user.

Adding sites to the 'Favourites' list

The unit list can be configured to show only 'favourite' units, rather than all units on the network. It is also useful for adding units over a WAN or dial-up that are not normally displayed. To add a unit to the favourites list:

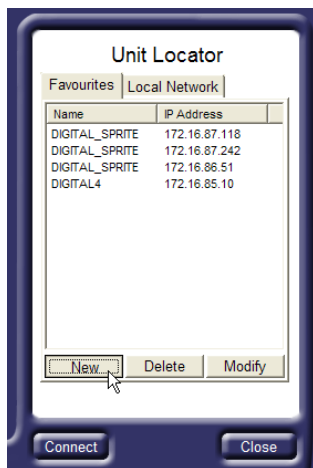
Click on the 'Favourites' button.



The list of units currently in your 'favourite' list is displayed. New units can be added to the list by clicking on 'New'. Units in the list can also be deleted or modified.

Click on the 'Local Network' tab to display a list of all the units on the LAN.

Once you have finished editing the units, click on 'Close'.



You can switch between displaying all units on the LAN and the 'favourites' list by right clicking on the unit list and selecting 'Display Local Units' or 'Display Favourites'.

You can also quickly add a unit to the 'favourites' list, by right clicking on the unit name, then click 'Add to Favourites'.



Viewing images in full or multiscreen view

Images can be viewed in a full (single) or multiscreen format. Each screen segment can be changed to view the required camera.

Note: Selecting a Multi display may slow down the updates as multiple connections are made to the digital recorder at the same time.



Viewing cameras in full or multiscreen

Use the Full and Multi key to toggle between a single camera view or multiple cameras. Pressing the Multi key will toggle between 4, 5+1, 6, 9, 8+2, 12+1, 16-way views (the number of available multiscreen views is

Selecting cameras

Click on a camera button to view a specific camera. The selected camera button will be highlighted in red. Greyed-out buttons are either non-viewable or failed cameras.



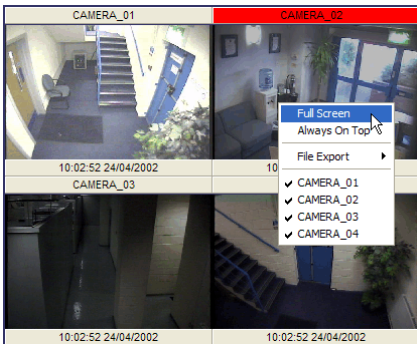
limited by the camera inputs limits on the unit)



Changing the cameras in each segment

When a multiscreen view is selected, click on the segment you which to change (camera name is highlighted in red) the highlighted segment can be changed using the camera buttons. To select a camera to highlight, click on the required quad segment.

Viewing cameras in a maximised display



Cameras can also be displayed in a maximised view by right clicking the image and selecting 'Full screen'. The image can be returned to normal view by right-clicking the image again and selecting 'Restore'.

If the aspect ratio is incorrect when viewing in a full screen, select the 'Aspect ratio' option to re-size the image.

Click 'Always on top' to always display the video in the foreground.

Changing the image quality

The quality of transmitted images can be changed to speed up the update rate when viewing cameras over slow or dial-up networks. It is not possible to change the image quality whilst playing back images.

Note: Changing the quality of transmitted images **does not** affect the quality of recorded images.

To change the image quality of transmitted images:



Click on the Hi, Med, and Lo buttons to select the image quality. The currently selected image quality is highlighted in red.

The image size of Hi, Med, and Lo quality are 18KB, 12KB, and 6KB respectively.

Controlling telemetry cameras

Cameras that have PTZ capability can be controlled using the Network viewing software.

Note: Telemetry is not available whilst playing back.



The telemetry control (opposite) is displayed when a camera with PTZ capability is selected.

This control has the following features:

- Pan and Tilt
- Zoom In/Out
- Iris Open/Close*
- Focus near/far
- Wash – momentary
- Wipe – toggle
- Lights – toggle
- Auto-pan
- Patrol
- Preset

* To open or close the Iris, press the CTRL key as you click on Zoom In or Out

Click on the preset button to toggle the number pad on or off.

To go to a preset position either type the preset number into the white text box, or click on the relevant numbers and click on 'Go'.

Users logged on with an administrator password can enter the preset number and **right click** 'Go' to set or delete a preset position.



Controlling telemetry using the keyboard

When viewing in the full screen mode, the telemetry buttons disappear from the screen. If telemetry control is still required in full screen then use the following keys:



Pan and tilt control. Press and hold the relevant key to pan and tilt, and let go to stop panning and tilting.



Zoom control. Use the 'Insert' key to zoom in, and the 'Delete' key to zoom out.



Focus control. Use the 'Page Up' key to focus near, and the 'Page Down' key to focus far.



Iris control. Use the 'Home' key to open the Iris, and the 'End' to close the Iris.



Playing back recorded images

Images can be played back from the digital recorders hard disk using the network viewing software. To play back images:



Click on the play button to enter playback mode.

The following buttons are displayed:

- Pause – Click to pause the image.
- Rewind – Click to rewind (frame rewind in pause mode), multiple clicks will increase the rewind speed.
- Play – Playback images at normal speed.
- Fast Forward – Click to fast forward (frame advance in pause mode), multiple clicks will increase the fast forward speed.
- Rewind/Fast Forward speed control – Drag the slider to increase the rewind/fast forward speed from x2 up to x64.



Enter the time and/or date and click 'Goto' to playback images from a particular time and date. If this time or date is not available it will display images from the nearest time.

Viewing the event log

When an alarm or activity detection is triggered on the digital recorder the event is stored in the event log. To view the event log:



Click on the 'Event' button to display the event filter screen

The event filter screen is used to remove events which are not required from the Event log. The items which can be filtered are:

Type – Type of event, alarm, activity, or system.

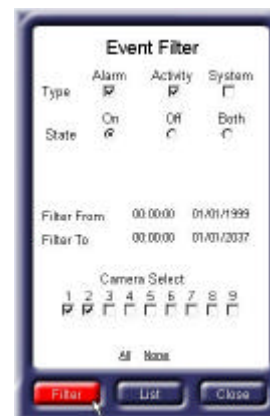
State – Whether the event is on, off, or both

Filter from – Start date of the filter.

Filter to – End date of the filter.

Camera select – Select cameras to view in the filter.

Once the filter has been set, click on 'List'.





The Event log will display the list of filtered events. Click on an event to display the images of the event as it happened. Click the << or >> to move backward or forwards through the list of events. Selecting 'Auto Update' will automatically update the images when an event is selected.

If you find the required event, click on 'close' to remove the event filtering menu and display the playback buttons.



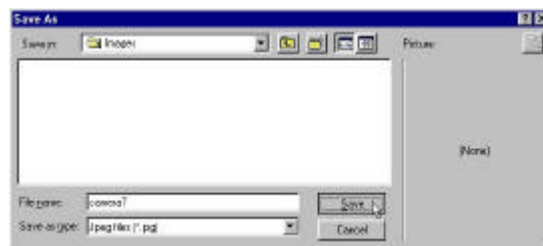
Copying single images (JPEGs) to a local computer

Single live or playback images can be copied to the user's computer in JPEG format. JPEG images can be viewed and printed using most drawing software, or using a browser such as Microsoft® Internet Explorer. To copy an image to your computer:



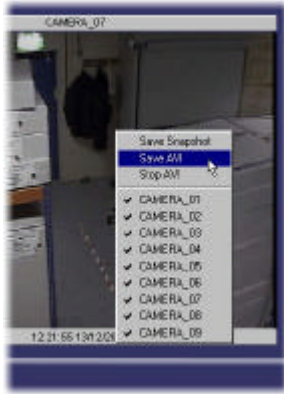
Right click on the video window to display the camera options. Click on 'Save Snapshot'

A 'Save As' screen is displayed, select a folder on the computer to store the image, and type in a file name. Click on save. The image is saved to the selected folder and the 'Save As' window will close.



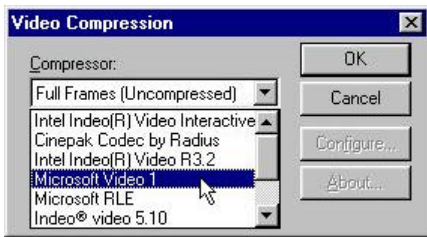
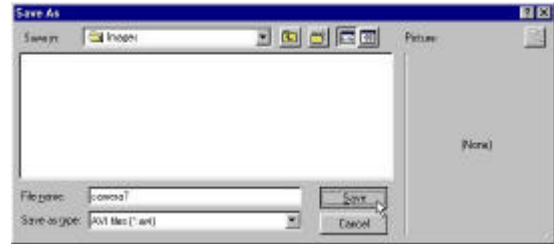
Saving multiple images (AVI's) to a local computer

Live or playback images can be saved to the user's computer in an AVI (movie) format. AVI files can be replayed using the Media Player supplied with Microsoft® Windows®.



Right click on the video window to display the camera options. Click on 'Save AVI'

A 'Save As' screen is displayed, select a folder on the computer to store the AVI, and type a file name. Click on 'Save'.
The image is saved to the selected folder and the 'Save As' window will close.



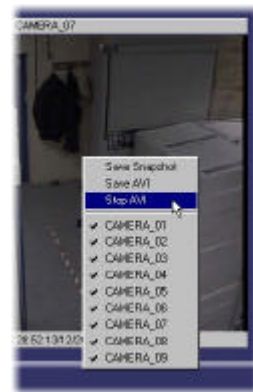
Select a compression method for the AVI, 'Microsoft Video 1' compression method is recommended, and click 'OK'.

The images displayed in the video window will now be recorded to an AVI file.

Note: Full Frames (Uncompressed) is not recommended.

To stop the AVI recording, right click on the video window and click on 'Stop AVI'.

Warning: AVI files can be very large, as a rule of thumb an AVI file will require approximately 150KB of storage for every second recorded.



Stored AVI's can be played back using the Media Player which is supplied with Microsoft® Windows®.

Exporting encrypted images to a local PC.

Images stored on the digital recorder can be exported across the network to your local PC. These files are copied with the encryption intact so they can be played back using our PC Playback software. This is the recommended method of copying images off the digital recorder. To export images to your local PC:

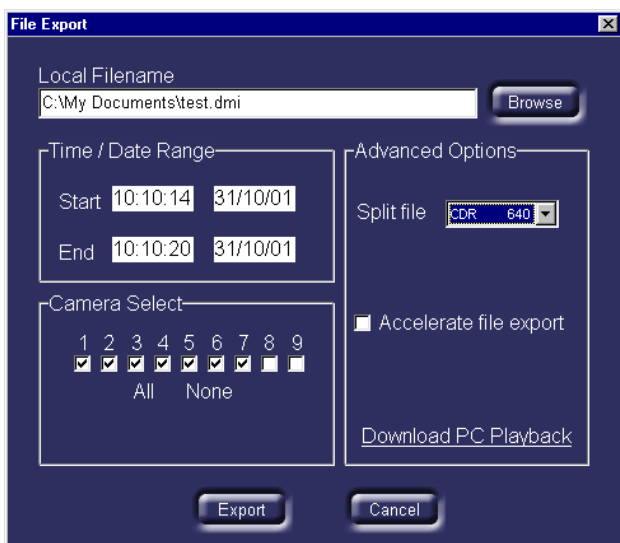


Either in playback mode or viewing live cameras **right click** on the video window to display the camera options. Click on 'File export' and then 'Mark start' to tag the first image to be exported.

Continue playing back or viewing the images until you want to tag the last image to be exported. **Right click** the video window again and then click on 'File export' and then 'Mark End'. If you need to remove the markers click on 'Clear Markers'



The 'File export' window is displayed when 'Mark end' is clicked. This window is used to:



- Select the location for the file.
- Select which cameras to export (less cameras will take less time to export).
- Select the start and end time and date.
- Select whether to split the file, if the exported file is large, the file can be split to fit onto different recording media, such as CDR or Zip®.
- Select whether to accelerate the file export, this will not display video updates whilst the export is taking place, which is faster.
- Download the PC Playback software for playing back the exported images at a later date.

Once the options have been selected, click on export to begin exporting the images. The file export window will clear and the text 'File export in progress is displayed'. This will disappear when the export is complete.

If you need to cancel an export, right click on the Video window and select 'File export' and 'Cancel export'



Tip: If you know the start and end times of images to be exported then use the 'Custom' option and enter the times in directly when the 'File Export' window is displayed.

Administrator functions

Administrators of the system can restrict access to specific features, and configure e-mail messages on alarms, activity detection, and camera fails. To access the System set-up screen:

1. Log in as the administrator. The default user name and password is **admin**.
2. Click on 'Setup' in the network viewing software.

Warning: It is strongly recommended that the administrator password is changed to prevent unauthorised access to the digital recorder settings.

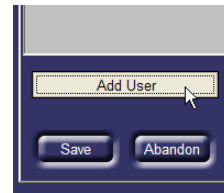
To change the administrator password:

1. Log in with the default Administrator username and password (both **admin**)
2. Click on 'Setup' to enter the configuration menu.
3. Click on the 'Passwords' tab.
4. Select the username 'admin' and click on 'Change password'
5. You will need to enter the new password, and confirm it.
6. The administrator password has now been changed.

Setting up a new user

New users can be added to the user list by the administrator and given access rights to certain features. To set up a new user:

Click on 'Add User' under the Passwords tab

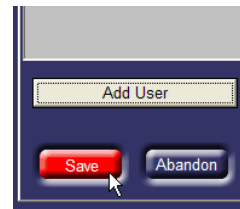


Enter the required Username and password, the password will need to be re-entered for confirmation.

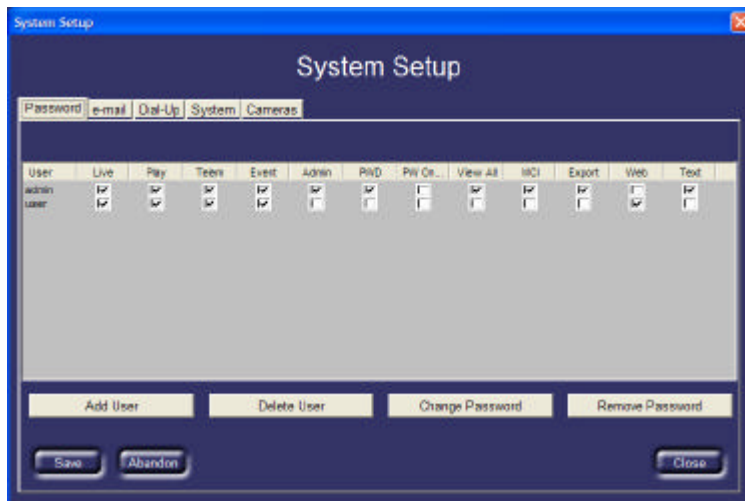
Select the access rights of the user as Default or Admin. Selecting Admin gives the user administration rights.

Click on 'Accept' to add the user.

Once the user is included in the list, click on 'Save'.



Giving users access rights



The features that can be configured for each user are are:

- Live – Allows a user to view live images.
- Playback – Allows a user to view recorded images.
- Telemetry – Allows a user to control telemetry cameras.
- Event – Allows a user to view the event log.
- View all – Allows a user to view hidden cameras.
- Export – Allows images to be exported from the unit to your local PC on the network.
- Web – Allows a web browser to be used to view images.

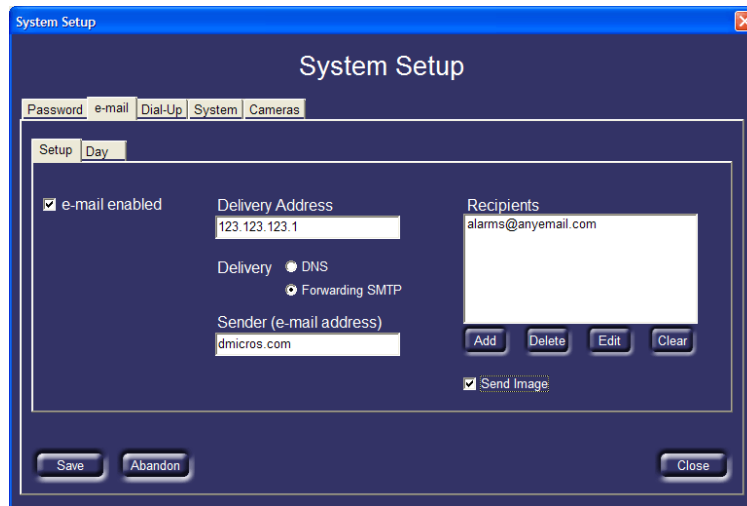
It is possible to add and delete users and change or remove passwords for each user, if the PW Once option is checked, the password is only valid for one login, the user will be asked to specify a new password.

Select the Admin option to allow users to perform administration tasks, such as e-mail setup and user configuration.

If the 'Password' option is ticked, a user can change their password at any time.

Sending an event E-mail

It is possible to e-mail specific addresses when events are triggered.



To configure e-mail on event:

1. Click on the 'e-mail' tab on the top of the page.
2. Check the 'e-mail enabled' box.
3. Enter the IP address of your mail server in the Delivery Address box. This can also be the IP address of an ISPs mail server if you do not have an on-site address.
4. Select the Delivery method, either 'DNS' or 'Forwarding SMTP'. More often than not this will be 'Forwarding SMTP', but check with your provider.
5. Enter your email address as the sender. This is just the domain name rather than the full email address (i.e. dmicros.com)
6. Click the 'Add' button and type the email address of the recipients.

You may need to ask your IT department for the following information when setting up the e-mail facility:

- The IP address of the mail server,
- Whether it is a Forwarding SMTP or DNS address, and
- The domain name which can send emails through the server.

TIP: If you are using a web based mail server, for example from your ISP. You are often given the mail server address in the form; mail.yourisp.com or similar. You can find out the IP address of this by clicking Start > Run, and then entering 'ping mail.yourisp.com -t'. The IP address is displayed when the mail server replies.

Each e-mail event will be approximately 20KB if an image is sent, if you do not wish to send an image with the event, uncheck the 'Send Image' box.

Important note: When the 'Send Image' box is checked the recipients of the e-mail will receive images of all cameras in alarm or activity whether they are hidden (covert) cameras or not.

Selecting events to be sent by e-mail

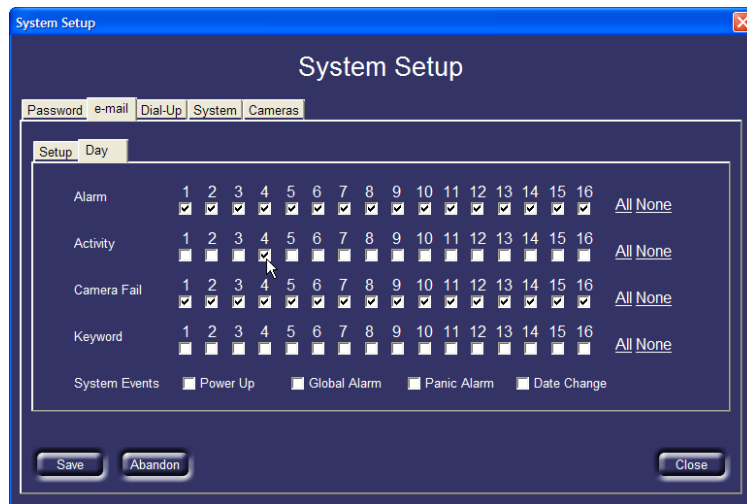
Once the e-mail addresses have been configured, you will need to select which events to be sent by e-mail. To select events to be sent by e-mail:

1. Click on the Day, Night, or Weekend tab*
2. Click on the cameras to be sent by e-mail for Alarms, Activity, or Camera fails.
3. Select any System events that need to be sent by e-mail, such as power-up, Global alarm, Panic alarm, or date change.

* The Night and Weekend tabs are only displayed if a Night and Weekend schedule is set in the digital recorder.

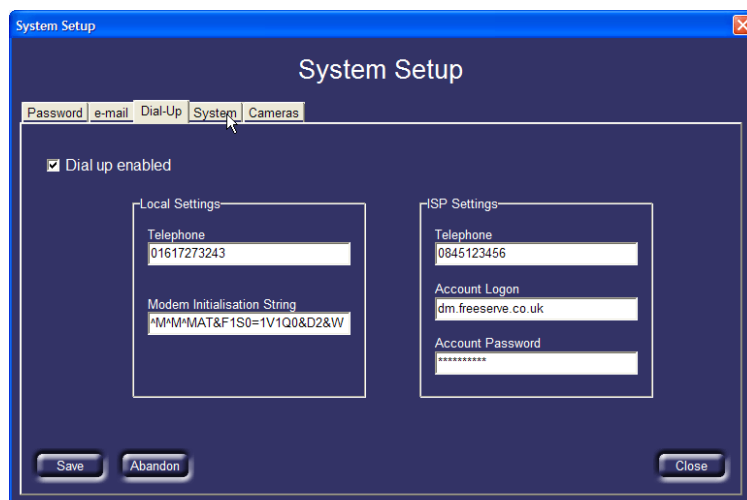
Each e-mail event can be sent with an attached snapshot of the event (if selected) listing the alarm number, and a link to the exact time and date on the digital recorder using the network viewing software.

Caution: Each e-mail event is approximately 20KB in size if an image is sent, false alarms and activity detection could fill your e-mail inbox if they are not properly configured.



Configuring Dial-up settings

If you use a modem to dial into the digital recorder (PPP), it is possible to configure the digital recorder to send an email using the external modem when used in conjunction with the e-mail setup (previous page). The modem will dial up an Internet Service Provider, send the e-mail, and then drop the connection. If Dial-up is enabled then all event emails will be sent via the modem, not over the network.



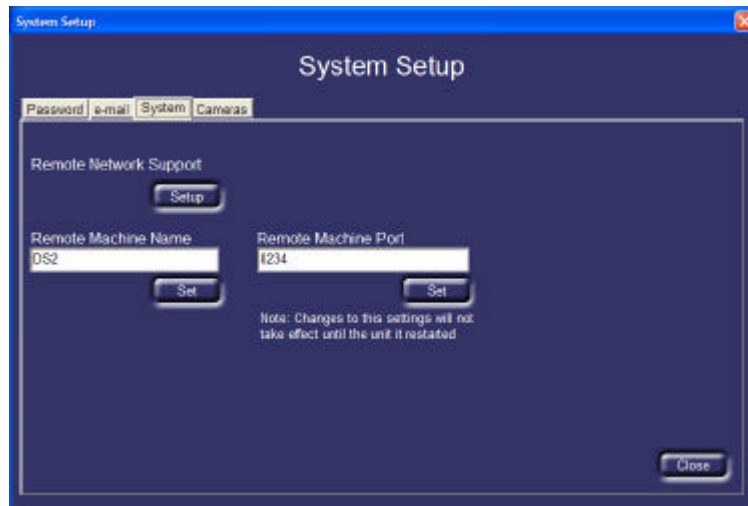
To set up the digital recorder to dial up an ISP:

1. Check the 'Dial up enabled' box.
2. In the Local Settings part of the screen, enter the telephone number of the digital recorder (this will be attached to the email, so the recipient knows where to dial).

3. If necessary, adjust the Modem Initialisation String. This is defaulted to work with US Robotics modems, but may have to be changed for other brands, check with the manufacturer for details. Note that this overwrites the string set in the digital recorder.
4. In the ISP settings part of the screen, enter their dial-up number, your account login name, and your account password.
5. Click 'Save' to register these settings.

Setting up the system

The administrator can configure the digital recorder remotely, by selecting the 'System' tab.



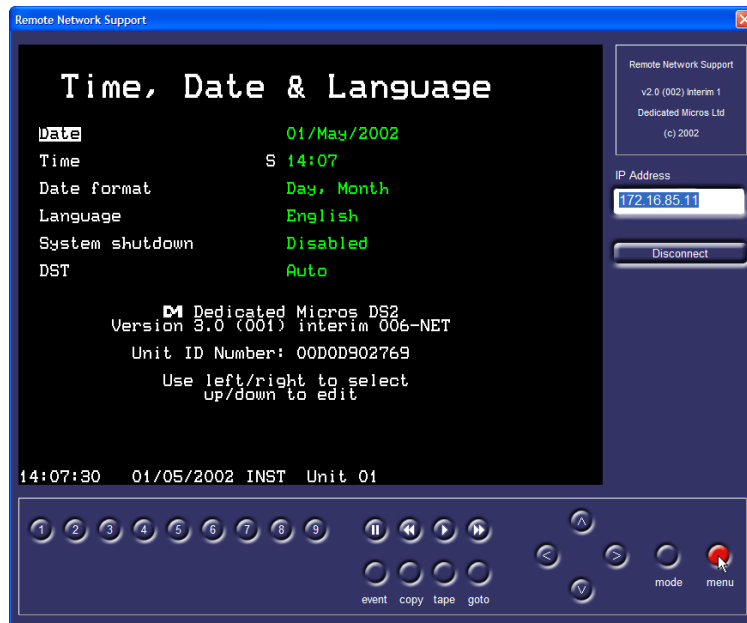
Remote Network support

It is possible to remotely configure the digital recorder using 'Remote Network Support'. This allows the remote control of the menus. Click on the 'Setup' button to start remote network support.

Enter the IP address of the digital recorder you wish to configure, and click on 'Connect with Video' or 'Connect without Video'. The IP address may already be entered if you are accessing the network setup function using the Network Viewing software.

Note: Connecting with video will significantly slow down operation of the menus, it is only advised that you connect with video only if you need to view the cameras or set up activity detection grids. You will need to enter your Administrator password to gain access to the unit.

Once you are logged onto the unit, click and hold down the 'Menu' button to access the menus:



The menus you see are identical to the menus that are configured at the unit locally, any changes you make will be seen on the digital recorders main monitor. Click on the cursor keys to move the highlighted cursor around the screen, and edit the options. Click on the 'menu' button to move to the next menu page. Once you have finished configuring the digital recorder, click on 'Disconnect'.

Note: There may be a small delay when navigating the menus if the network is slow or you are connected using a dial-up connection.

Changing the Remote Machine name

The unit name can be changed by entering up to 30 characters of text in the 'Remote Machine Name' box and clicking on 'Set'. The unit name is changed at the next logon.

Changing the Remote Relay Caption

The remote relay on the live display can be renamed (if available). By default, this is labelled 'Relay', the remote relay can have up to 10 characters in the label.

Changing the unit Remote Machine Port number

By default, the port number of the digital recorder is 8234 for Network Viewing Software and 8235 for Remote Admin support. Ordinarily, it is not necessary to change the port number of the machine unless there is either:

1. More than one unit on the LAN and you are using a broadband connection with a single public IP address, or
2. A specific policy for controlling the port numbers on the network is in place.

If either of these are the case, then the port number can be changed using the Remote Machine Port setting. Enter the new port number into the text box and click 'Save'. The unit must be re-started locally before this setting will take effect.

Warning: Ensure that the port number does not conflict with any other device on the network, if port number conflict it is likely one or both of the units with that port will not operate. Get advice from the network administrator **before** changing the port number.

Valid port numbers are between 0 and 1023 (Well known ports), 1024 and 49151 (Registered ports), and 49152 through 65535 (Dynamic and Private ports).

When changing the Remote Machine port number, the Remote Admin port number is changed to the Remote Machine port number plus one. For example, if the Remote Machine port number is 6000, the Remote Admin port will automatically be 6001. Therefore, if several machines are used on the same network, it may be necessary to increment each machine's port number by 2 to allow full operation. For example, port 6000 for unit 1, port 6002 for unit 2 etc.

Note: When entering the units IP address into the Network Viewing software or Remote Admin software, type the address in the following format:

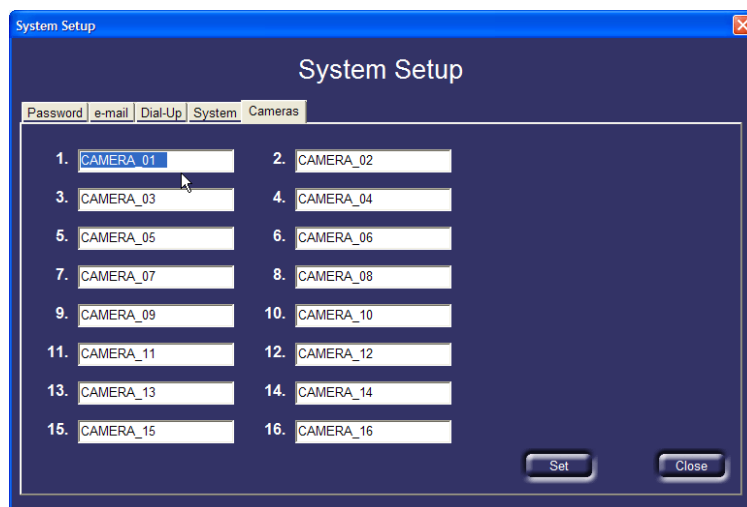
192.168.0.2:6000 (IP address followed by a colon and the port number).

Note that there is no indication as to the new port number on the digital recorder itself, the port number is only revealed when a unit is detected on a LAN using the Network Viewing software.

If you are using a broadband connection, you will need to use the 'Port Forwarding' or 'Virtual Server' function of the router to direct port traffic to the correct IP address.

Changing the Camera text

Changing the camera text using the digital recorders front panel, or external keyboard can be a laborious task. You can change the camera text quickly by clicking on the 'Cameras' tab and entering the camera title for each camera.



Once you have entered to camera titles, click 'Set' to register the settings.

To exit the System Setup menu, click 'Close'.