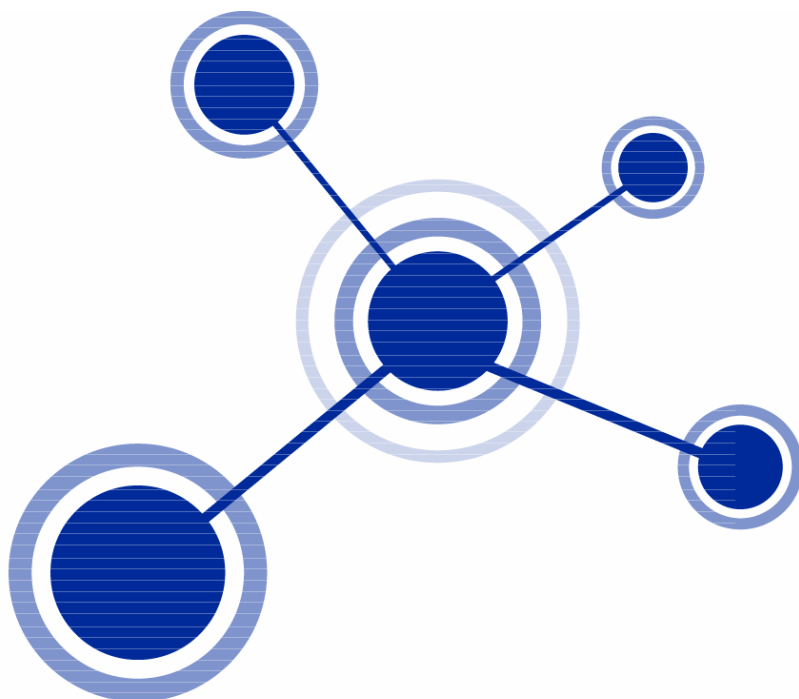


NETWORK VIEWER

USER MANUAL



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1. NETWORK CLIENT VIEWER MANUAL

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.....

Chapter 1 Network Viewer

The DVR Viewer is a dedicated client program that connects to, monitors and manages up to 16 DVRs simultaneously.

1.1 SYSTEM REQUIREMENT

The DVR Viewer receives, decodes and displays data for up to 16 DVRs or up to 256 cameras simultaneously requiring a powerful personal computer to take full advantage of the program. The following is the minimum and recommended PC specification.

	Minimum	Recommended
OS	Windows 2000	Windows XP
CPU	Pentium III 1 Ghz	Pentium IV 2.8 Ghz
RAM	128MB	512MB
Video Card	16MB	128MB
Free Space	50MB	2GB
Resolution	800x600x16	1024x768x32
DirectX	DirectX 7.0	DirectX 9.0c
Network	Ethernet 10/100B-TX	Ethernet 10/100B-TX
Port	Port 5400 ~ 5499 TCP	Port 5400 ~ 5499 TCP

1.2 Be sure to setup THREE of files together when you execute the viewer program on PC.

There are three of setup file on Viewer CD.
The one is viewer executer, the others are UDF Drivers.

1. What is UDF DRIVER?

The UDF Drivers is necessary to execute the copying data from CD/DVD on PC using Window XP. If do not setup this UDF Driver files, you will be faced with following problems.
This is applying to **WINDOW OS** only.

2. What is happen without UDF DRIVER?

The playback of copying data of CD/DVD is normal when connect to PC at first time. But, the second time playback is no working well on the small viewer when connect to PC.

This is no continuous with ART-DVR and Viewer, it depend on Window OS. This problem is no appearing either latest Test and first stage of development. It caused problem from Update of windows. When use the Media such as CD-RW, DVD on PC, it needs to setup the "UDF Driver." Under Window XP, our DVR automatically setup the UDF Driver. But the UDF Driver is modified under updated windows recently.

So, User who uses the window XP have to setup the UDF Driver manually.

3. How to setup the UDF DRIVER in safety.

There are two type of acting file- "udfread_v5.1.1.213_inst.exe" and "updateudfreader_7.exe".

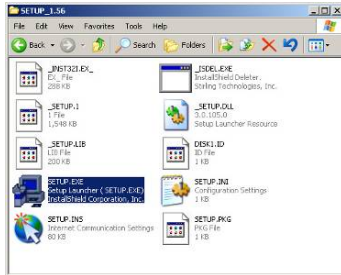
De executes the **"udfread_v5.1.1.213_inst.exe"** at first.

Next do executes the **"updateudfreader_7.exe"**.

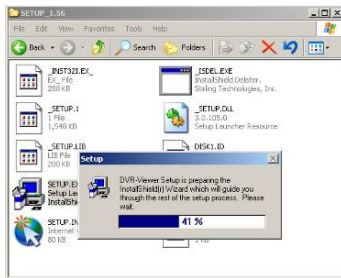
Please take the turns, do NOT change the order.

NETWORK VIEWER INSTALLATION

1.3 INSTALLING THE DVR VIEWER



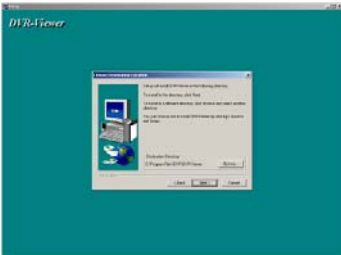
Insert the program CD into the CD-ROM or DVD-ROM drive of the computer and locate the SETUP.EXE file.



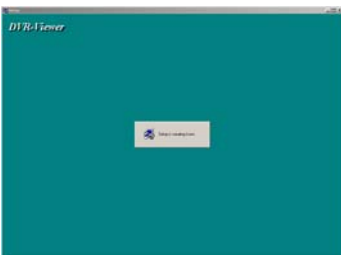
Double-click on the setup file, and the program will start the installation.



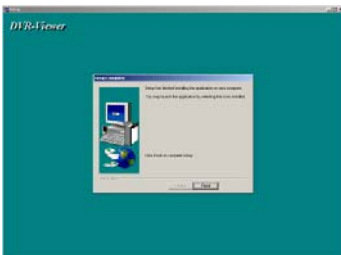
Click on NEXT.



The DVR viewer will be installed in its default folder of C:\Program Files\DVR\DVR-Viewer. If the folder needs to be changed, click on "BROWSE..." button and then select a different folder.



The setup program will run through its series of installation process.



Click on FINISH to complete the installation.

NETWORK VIEWER INSTALLATION

1.4 DVR VIEWER - LAYOUT

Locate the DvrViewer icon on the desktop and double-click on it to run the client software. The program can also be located in START- Programs – DVR-Viewer.

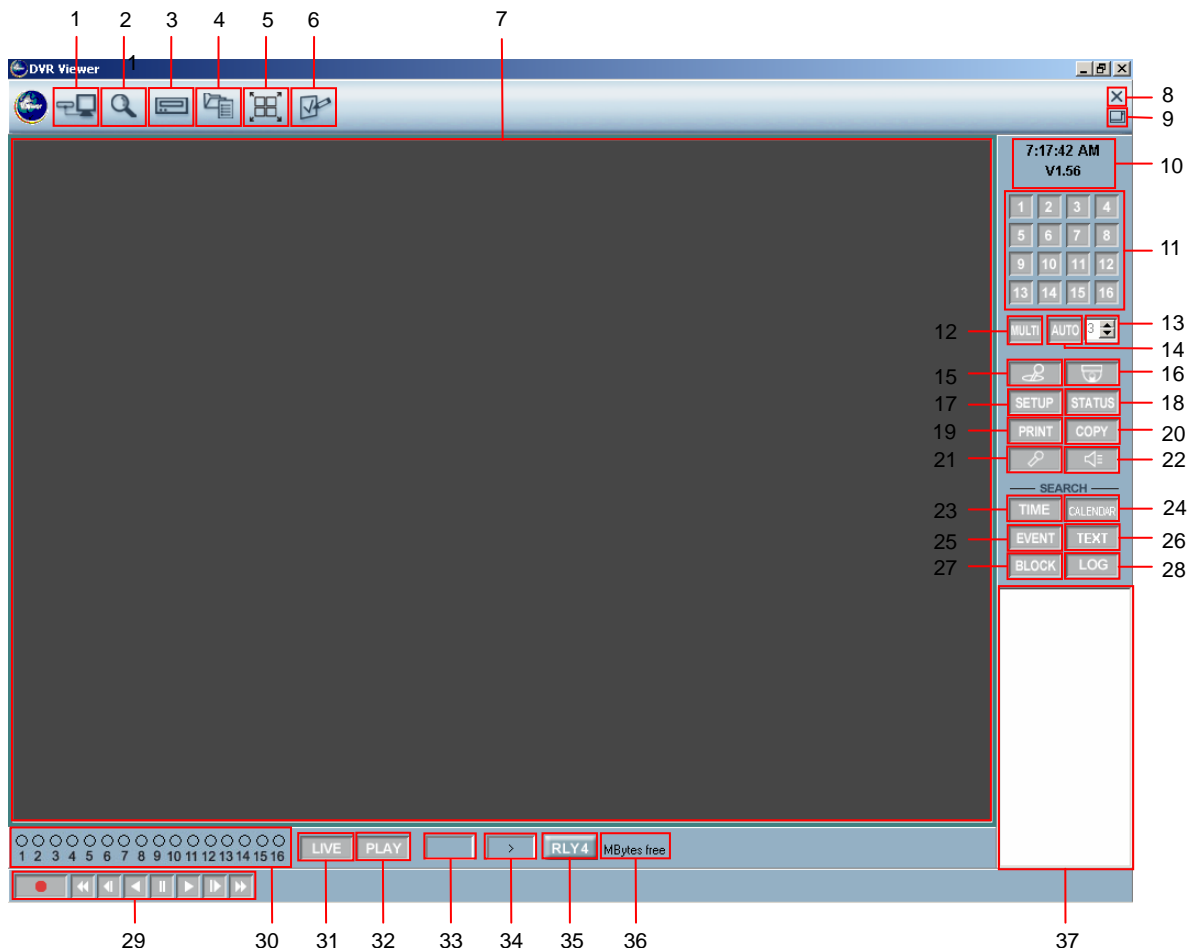


When the DVR Viewer is run for the first time, it prompts for the administrator's password.

Select and enter a password of up to 20 alphanumeric characters.

Click on OK to start the program.

The DVR Viewer has two display modes. When the program is run for the first time, it will be shown in the attached mode. The DVR Viewer then can be switched into detached mode to view up to 16 DVR windows simultaneously.



NETWORK VIEWER INSTALLATION

1. DVR LIST

The DVR List adds or removes individual DVRs and offers a variety of connection options.

The screenshot shows the 'Dvr List' window. At the top, there is a table with three columns: 'Name', 'Ip Address / Com Port', and 'MAC Address'. The table contains two entries: 'DVR 1' with IP '216.70.136.214' and MAC '00:0A:2F:20:06:06', and 'DVR 2' with IP '216.70.136.214' and MAC '00:0A:2F:40:04:99'. Below the table is a 'Count:2' label. Underneath is a section titled '[Dvr Information]' containing several fields: 'Type' with radio buttons for 'Network' (selected), 'RS-232C', and 'RS-485'; 'DVR Name' with a text box containing 'DVR 1'; 'IP / Port / MAC' with three input boxes (216, 70, 136, 214, 5400, and 000A2F200606); 'Domain Name' with a text box; 'Serial Port' with a dropdown menu set to 'None' and 'Baud Rate' with a dropdown menu set to '9600'; 'Password' with a masked text box; and 'Description' with a large text area. At the bottom are five buttons: 'Add', 'Change', 'Delete', 'Connect', and 'Cancel'. Red lines with letters 'a' through 'n' point to various elements: 'a' points to the table, 'b' to the 'Type' section, 'c' to the 'DVR Name' field, 'd' to the 'IP / Port / MAC' fields, 'e' to the 'Use IP Server' checkbox, 'f' to the 'Domain Name' field, 'g' to the 'Serial Port' and 'Baud Rate' fields, 'h' to the 'Password' field, 'i' to the 'Description' field, 'j' to the 'Add' button, 'k' to the 'Change' button, 'l' to the 'Delete' button, 'm' to the 'Connect' button, and 'n' to the 'Cancel' button.

Name	Ip Address / Com Port	MAC Address
DVR 1	216.70.136.214	00:0A:2F:20:06:06
DVR 2	216.70.136.214	00:0A:2F:40:04:99

Count:2

[Dvr Information]

Type: ☒ Network ☐ RS-232C ☐ RS-485

DVR Name: DVR 1

IP / Port / MAC: 216 . 70 . 136 . 214 5400 000A2F200606

Domain Name:

Serial Port: None Baud Rate: 9600

Password:

Description:

Add Change Delete Connect Cancel

a. DVR List

The DVRs that have been added are listed in this box.

b. Connection Type

Select the connection type to the DVR.

c. DVR Name

Enter the DVR name.

d. IP Address and Port

Enter the IP address and the port number for the DVR, if known.

e. Use IP Server

The DVR can be located on the internet using the MAC address displayed in the status screen. If the MAC address is to be used, "Use IP Server" box must be checked.

NETWORK VIEWER INSTALLATION

f. Domain Name / Use DDNS

The DVR can be located on the internet using a domain name, or a web address. The DVR must be registered with a Dynamic DNS service in order to be located. If the Domain Name is to be used, "Use DDNS" box must be checked.

g. Serial Port

Select the COM port and the baud rate if RS-232C or RS-485 protocols are used to connect to the DVR.

h. Password

Enter the password to access the DVR remotely. The password level entered will grant the access privileges assigned by the administrator.

i. Description

Add comments or notes to the DVR in this box.

j. Add

Once all the information for the DVR has been entered, click on ADD to add to the DVR list.

k. Change

After changing the DVR information, click on CHANGE to update the DVR information.

l. Delete

Highlight a DVR from the DVR List and then click on DELETE to remove from the DVR List.

m. Connect

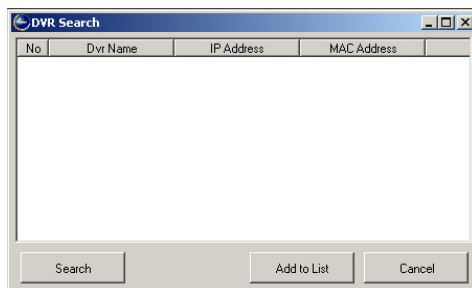
Highlight a DVR from the DVR List and then click on CONNECT to remotely connect to the DVR.

n. Cancel

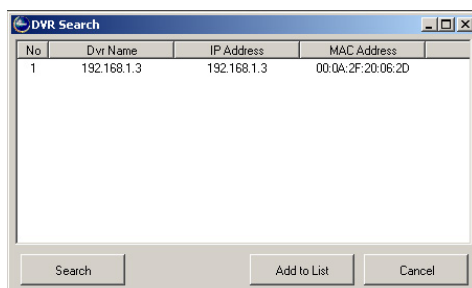
Click on CANCEL to exit from the DVR List menu.

2. DVR SEARCH

Within a local area network environment (LAN), it is possible to automatically scan and list available DVRs to be added to the DVR list.

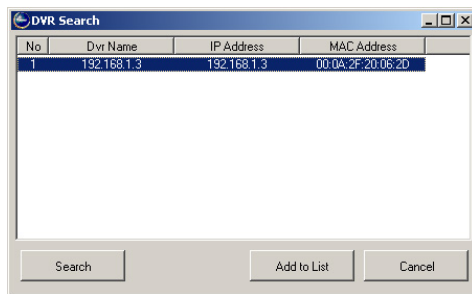


Click on DVR SEARCH to open the DVR Search window.

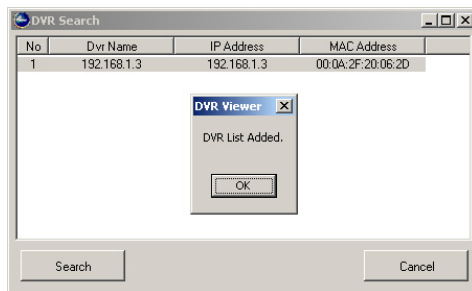


Click on SEARCH, and available DVRs will be listed.

NETWORK VIEWER INSTALLATION



Highlight a desired DVR to add to the DVR List, and then click on ADD TO LIST.

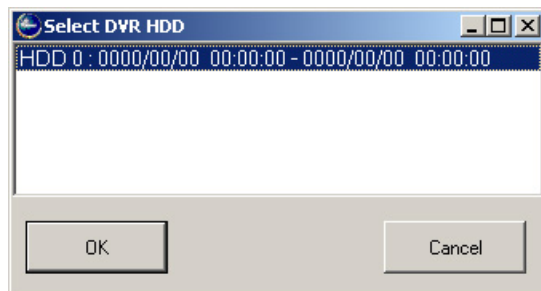


“DVR List Added.” Message will appear with a successful addition to the DVR list.

Click on CANCEL to exit from DVR Search.

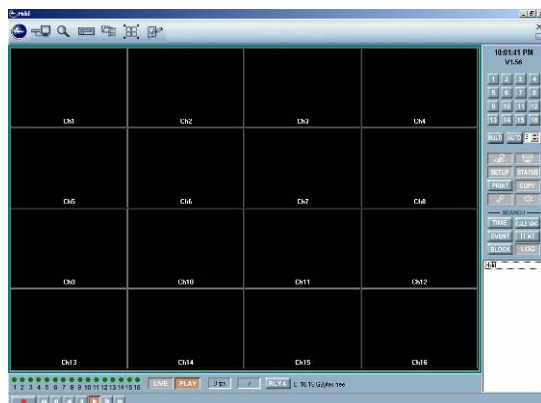
3. HDD SEARCH

The hard disk drive from the DVR can be directly connected to a PC, where the files can be searched and played back through the DVR Viewer.



Click on HDD SEARCH to open the HDD Search window

Select a hard disk drive, and then click on OK.



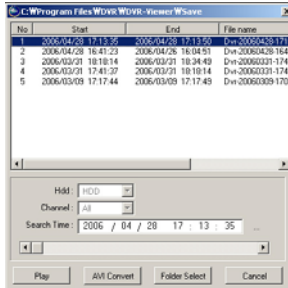
Recorded channels will be shown in the main channel display window.

The content of the hard drive can be further searched and played back using any one of the search features, or using the playback buttons to playback in slow, fast, or paused mode.

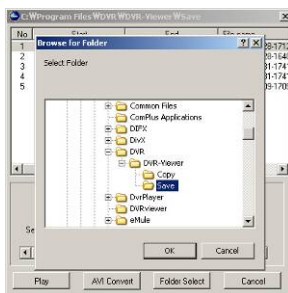
NETWORK VIEWER INSTALLATION

4. FILE SEARCH

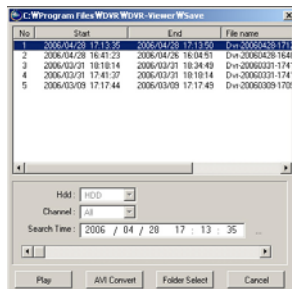
Backed up files and files that have been downloaded can be searched and played back.



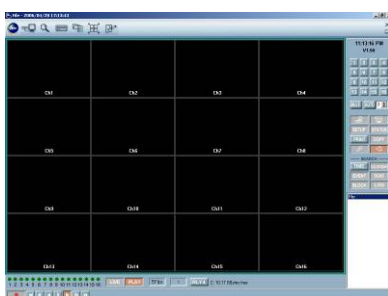
Click on **FILE SEARCH** to open the File Search window.



If the desired file is not listed in the current folder, then select the folder in which the files are saved by clicking on FOLDER SELECT.



Select a file to view, and then click on **PLAY** to begin the playback. The file can also be played back by double-clicking on it.



Once the playback starts, it can be slowed, paused and fast forwarded using the playback buttons.

The playback list can be viewed and selected again from the TIME search button once the playback starts.

5. ARRANGE WINDOW

Arrange window button works only in detached window mode (See #9). When viewing multiple DVRs, clicking on ARRANGE WINDOW sort and display all DVR connection windows in a tile format.

NETWORK VIEWER INSTALLATION



SINGLE DVR



1 ~ 4 DVRs



5 ~ 9 DVRs



10 ~ 16 DVRs

6. VIEWER OPTION

Viewer option defines the administrative options for the DVR Viewer, such as display options and the IP address of the Dynamic IP Server, and user management to create user name and passwords for additional users to access the DVR Viewer.

6.1 Viewer Option



Click on VIEWER OPTION to open the Viewer Option window.

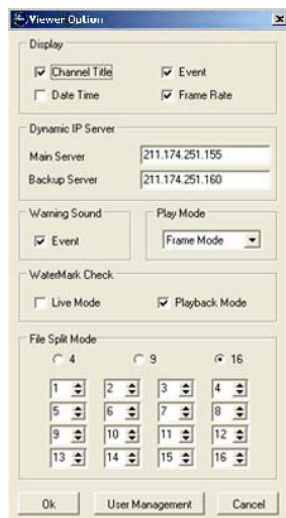
NETWORK VIEWER INSTALLATION

Check or uncheck various On Screen Display options as needed. By default, Channel Title, Event and Frame Rate are checked.

Modify the IP address for the Dynamic IP Servers as needed. The default IP addresses are:

- Primary Server: 211.174.251.155
- Secondary Server: 211.174.251.160

6.2 User Management



Click on USER MANAGEMENT to access the User Management window.



Modify the administrator's description and passwords as needed. Up to 20 alphanumeric characters can be entered for the password.

Press CHANGE to save the modification.



To add additional users, click on ADD.

NETWORK VIEWER INSTALLATION

User

User Name	Description
Administrator	Administrator

User Information

User Name:

Description:

Password:

Confirm Password:

Live: ☒ DVR Setup: ☐

Search & Play: ☒ DVR Control: ☐

Copy: ☐ PTZ Control: ☒

Live Audio: ☒ DVR Status: ☒

Save Change Delete Cancel

Enter the user name, description for the user, password and access privileges, and then click on SAVE to add the new user.

User

User Name	Description
Administrator	Administrator
Manager	Store Manager

User Information

User Name:

Description:

Password:

Confirm Password:

Live: ☒ DVR Setup: ☐

Search & Play: ☒ DVR Control: ☐

Copy: ☐ PTZ Control: ☒

Live Audio: ☒ DVR Status: ☒

Add Change Delete Close

The user setting can be modified by highlighting the user and clicking on CHANGE once the changes are made.

7. CHANNEL DISPLAY WINDOW

Live or playback video from the DVR is transmitted and displayed up to 16 channels. Each channel displays information regarding the specific channel according to the settings in VIEWER OPTION.

8. DVR CLOSE

The connected DVR can be disconnected by clicking on this button.

9. ATTACH / DETACH WINDOW

The channel display window can be attached or detached to the controls by clicking on this button.

10. TIME & VERSION DISPLAY

Displays the local time and current DVR Viewer version.

11. CHANNEL DISPLAY SELECTION

Any one of the single channels can be viewed in full screen mode by clicking on any channel numbers.

12. DISPLAY / MULTI CHANNEL VIEW MODE

Depending on the model of the DVR, the channel view modes can be changed by toggling on this button: 16 channel view mode, 13 channel view mode, 10 channel view mode, 9 channel view mode, 8 channel view mode, 7 channel view mode, 6 channel view mode, and quad view mode.

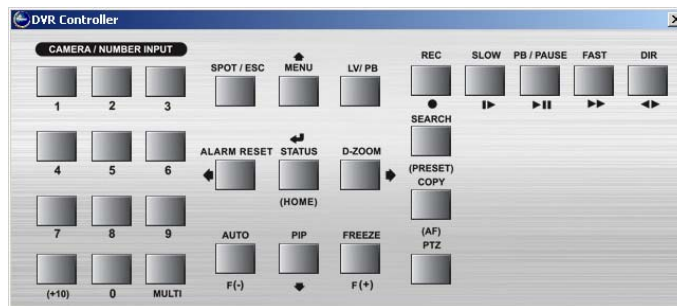
13. AUTOMATIC SEQUENCE DWELL TIME

Defines the dwell time for the automatic sequencing of view modes. Select from 1 to 9 seconds. The default is 3 seconds.

14. AUTOMATIC SEQUENCE

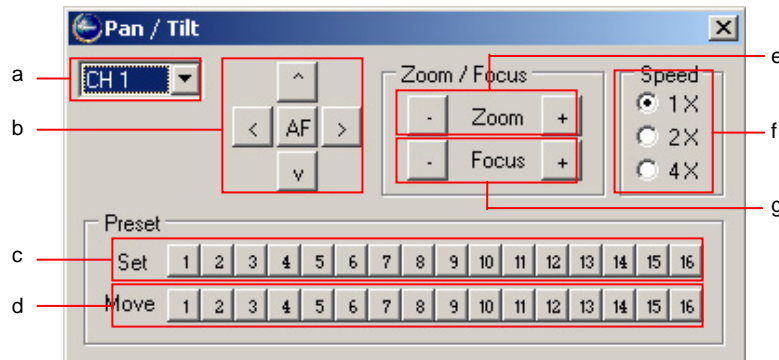
The channels sequence through different view modes automatically by enabling the AUTO button. Click on AUTO once more to stop the automatic sequence.

15. DVR CONTROLLER



Just as the IR remote controller, mouse and the front buttons on the DVR, the client software provides a controller to control the DVR remotely. The button functions are identical to the front buttons of this DVR. For more information on button functions,

16. PTZ CONTROLLER



Pan, Tilt and Zoom cameras can be controlled remotely through the DVR Viewer.

A. Channel select

Select the channel in which the PTZ camera is installed.

B. Directional buttons / Autofocus

Move the PTZ camera using the directional buttons. Toggle Autofocus on or off by clicking on AF.

C. Set preset points

Move the PTZ camera to the desired location, and then click on any of the 16 buttons to set a

NETWORK VIEWER INSTALLATION

preset position.

D. Move to preset points

Click on any of the 16 buttons to move the PTZ camera to predefined preset position.

E. Zoom control

Zoom in and out by clicking on the – or + buttons.

F. PTZ movement speed

Select the movement speed ratio.

G. Focus control

Focus in and out by clicking on the – or + buttons.

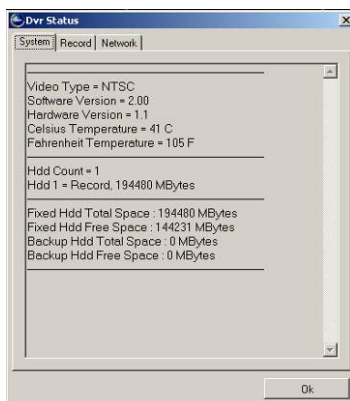
17. SETUP

Access the DVR setup window.(Please refer to the Main Manuel to access this function).

18. STATUS

Displays the current DVR status on System, Record and Network.

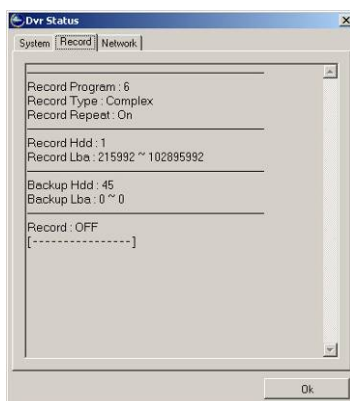
18.1 System



System status displays the following information:

- Video type
- Software version
- Hardware version
- Current temperature of the DVR in both Celsius and Fahrenheit
- Total number of hard disk drives
- Recording mode of the hard disk drives
- Total space of fixed hard disk drive
- Remaining free space of fixed hard disk drive
- Total space of backup hard disk drive
- Remaining free space of backup hard disk drive

18.2 Record

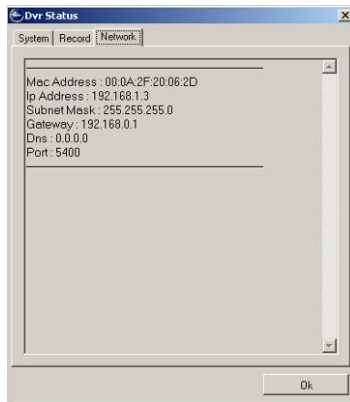


Record status displays the following information:

- Record program
- Event record mode
- Record repeat
- Number of record hard disk drives
- Logical Block Address of the record hard disk drives
- Number of backup hard disk drives
- Logical Block Address of the backup hard disk drives
- Record status

NETWORK VIEWER INSTALLATION

18.3 Network

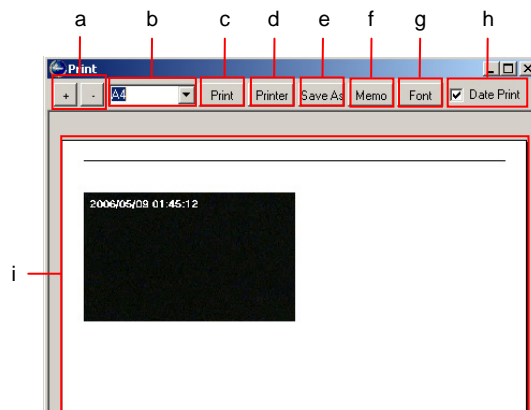


Network status displays the following information:

- Mac address
- IP address
- Subnet mask
- Gateway
- DNS
- Port

19. PRINT

In live or playback mode, select any of the channels and then click on PRINT to bring up the screen print window.



a. Zoom in / out

Click the + or – button to zoom in and out for the detailed view of the picture.

b. Paper size

Select the paper size. Available paper sizes are A3, A4, A5, B4, B5, Legal and Letter.

c. Print

Send the picture to the printer.

d. Printer

Select a printer to send the picture.

e. Save as

The picture can be saved as a JPEG or Bitmap format.

f. Memo

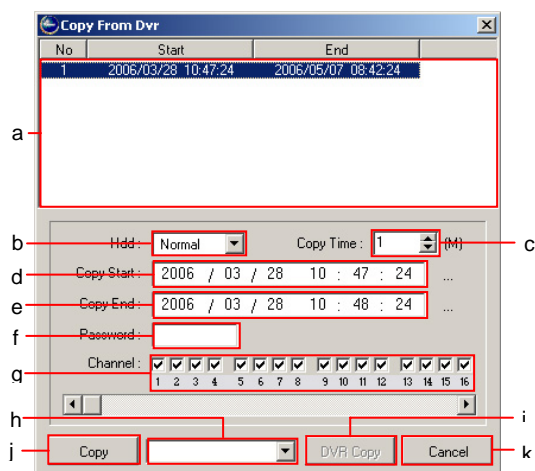
Add the memo for the picture to be printed.

NETWORK VIEWER INSTALLATION

- g. Font
Select the font for the memo.
- h. Date print
Select the date print option on or off.
- i. Preview window
The picture to be printed is previewed in this section.

20. COPY

The data on the DVR can be downloaded onto the PC using the COPY function. The data can also be backed up directly onto available backup media on the DVR.



- a. Available data
Displays available data to be downloaded.
- b. Hard disk drive selection
Select the hard disk drive to download from. If unknown, leave the selection on NORMAL.
- c. Copy time
Define the interval of the file to be downloaded. Available time interval is 1 through 60 minutes. As the value is adjusted, the COPY END value will be automatically adjusted.
- d. Copy start
Enter the starting time of the data to be downloaded.
- e. Copy end
Enter the end time of the data to be downloaded.
- f. Password
Encrypt the downloaded copy with a password. Up to 8 numbers can be entered for the password.
- g. Channel
Select the channels to be downloaded.
- h. DVR media
Select the media on which the DVR will utilize for backup. All three USB ports and the internal DVD burner can be selected.

i. Copy

Click on copy after all parameters for downloading.

j. DVR copy

After selecting the media to be backed up on the DVR, click on DVR COPY to begin the backup process on the DVR.

k. Cancel

Exit from the COPY window.

21. MICROPHONE / TALK

For the voice communication over the internet, click on the MICROPHONE button and then talk into an available microphone.

22. SPEAKER / LISTEN

Listen in on any of the four channels with audio recording over the internet. Bring any one of the channels with audio recording to full screen to listen into a specific channel.

23. TIME SEARCH

Search for a specific time for remote playback using a time line.

24. CALENDAR SEARCH

Search for a time for remote playback using a calendar based search window

25. EVENT SEARCH

Search for events for remote playback.

26. TEXT SEARCH

Search for text strings or keywords for Point of Sales integrated DVRs.

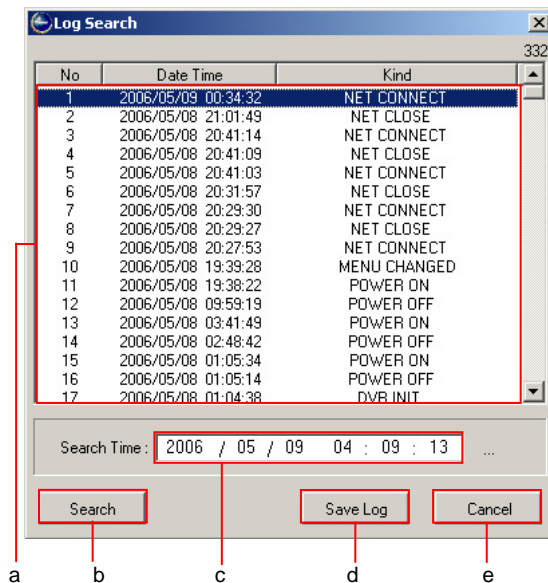
27. BLOCK SEARCH

Search on Logical Block Address for remote playback. Please see 10.5.5 BLOCK SEARCH under.

NETWORK VIEWER INSTALLATION

28. LOG SEARCH

View a list of events that occurred on the DVR.



a. Log list window

List of DVR logs from the most recent to the oldest.

b. Search

Click on search to view available log list.

c. Search time

Select the year, month, date, hour, minutes and seconds of the *end* of the log list to retrieve.

d. Save log

Save the log list onto the computer.

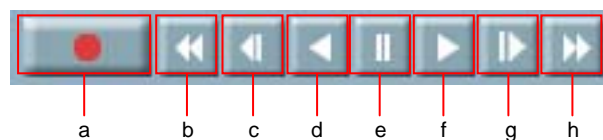
e. Cancel

Exit from the log search window.

29. RECORD / PLAYBACK BUTTONS

The remote playback can be controlled just as on the DVR. The remote playback can be played in normal, slow, and fast modes in both forward and reverse direction.

The DVR Viewer can also record the remote transmission onto the computer's hard disk drive.



a. Record

Click on the RECORD button to start recording on to the computer. When recording, the box below the main channel display window will be outlined in red.

b. Rewind

This button can be toggled for rewind speed of 2x, 4x, 8x, 16x, 32x, 64x and 128x.

c. Reverse slow

This button can be toggled for a slow reverse playback speed of 1/2x, 1/4x, 1/8x, 1/16x, 1/32x, 1/64x and 1/128x.

d. Reverse play

Normal speed playback in reverse direction.

e. Pause

Pause the playback during remote playback or live monitoring.

f. Play

Normal speed playback in forward direction.

g. Forward slow

This button can be toggled for a slow forward playback speed of 1/2x, 1/4x, 1/8x, 1/16x, 1/32x, 1/64x and 1/128x.

h. Fast forward

This button can be toggled for fast forward speed of 2x, 4x, 8x, 16x, 32x, 64x and 128x.

30. CHANNEL STATUS

Displays the status of the channels.

- Grey: non-recording mode
- Yellow: manual recording mode
- Red: event recording mode
- Green: schedule recording / playback mode

31. LIVE

When the DVR Viewer is connected to the DVR, it starts with the live view mode, and this button will be pressed and highlighted. Click on LIVE to toggle back to live view mode.

32. PLAY

The remote playback mode can be entered by clicking on PLAY button, just as the PLAY button is pressed on the DVR. When the PLAY button is clicked the remote playback will start with the oldest data on the DVR. Next time PLAY button is clicked the playback will resume from where it was left off.

33. FRAMES PER SECOND

Displays the frame rate of incoming live stream or playback stream.

34. LIVE / PLAYBACK BUTTON STATUS

During live or playback, this window will display the direction and the speed of the playback direction.

35. RELAY 4

Manually trigger relay 4 on the DVR. The relay 4 option must be set to user option.

36. AVAILABLE SPACE ON COMPUTER

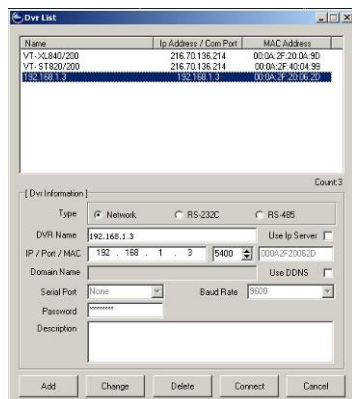
When connected to a DVR, this section will display available recording space on the computer.

37. ACTIVE DVR / FILE / HDD

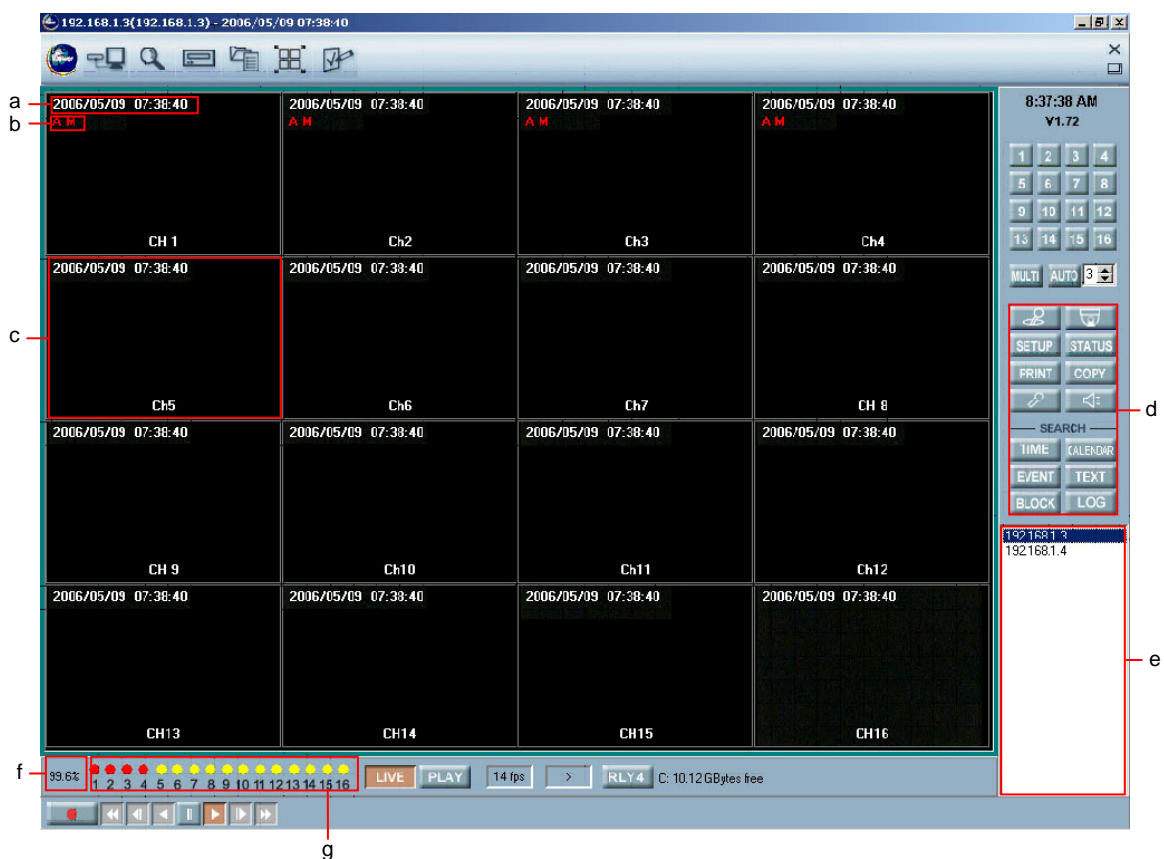
Displays a list of connective DVRs, playback from FILE SEARCH and HDD SEARCH.

NETWORK VIEWER INSTALLATION

1.5 DVR VIEWER - LIVE MODE



Click on the DVR LIST, highlight a desired DVR and then click on CONNECT.



a. DVR's local time
Displays the DVR's local date and time

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b. Event message

Displays the channel's event messages, alarm and motion.

c. Channel window

The DVR channel window can be double-clicked for a full screen mode. The channel window can also be zoomed by dragging the left mouse button over the channel window. The size of the box created by dragging will be the outline of the channel window to be zoomed in.

d. DVR functions

Some of the DVR functions may not be available depending on what user account the DVR Viewer has been signed on with, and also with what user level password the DVR has been connected to.

e. DVRs online

If more than one DVR is connected, then the live view of the DVRs can be selected by clicking on the desired DVR name.

f. Remaining HDD space

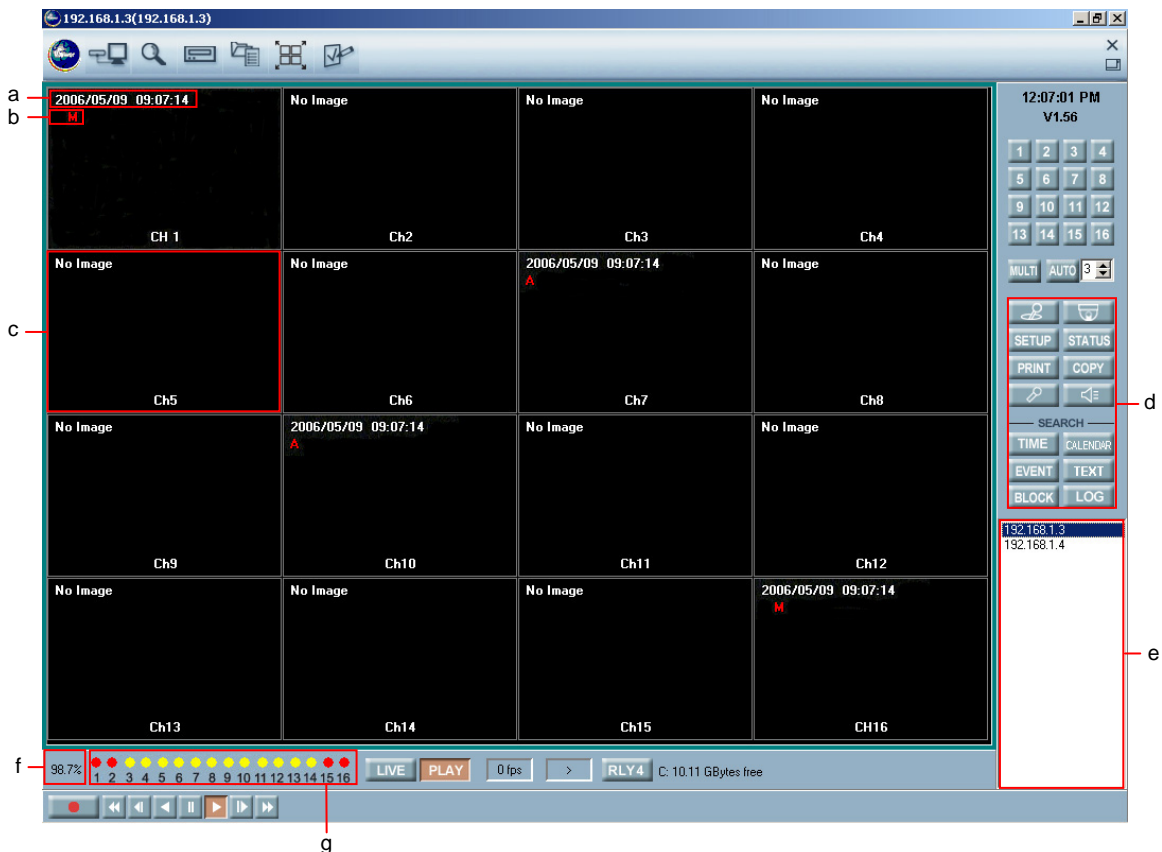
Displays remaining hard disk drive space on the DVR.

g. Channel status

Displays the status of the channels.

1.6 DVR VIEWER – PLAYBACK MODE

Any DVRs that are connected online can be accessed to do data search remotely from the DVR and then transmit to the DVR viewer for remote playback.



NETWORK VIEWER INSTALLATION

a. DVR's playback time

Displays the DVR's playback date and time. Channels without recording show NO IMAGE.

b. Event message

Displays the channel's event messages at the time of the recording.

c. Channel window

The DVR channel window can be double-clicked for a full screen mode. The channel window can also be zoomed by dragging the left mouse button over the channel window. The size of the box created by dragging will be the outline of the channel window to be zoomed in.

d. DVR functions

Some of the DVR functions may not be available depending on what user account the DVR Viewer has been signed on with, and also with what user level password the DVR has been connected to.

e. DVRs online

The live view of different DVRs can be selected, as well as the playback mode, by clicking on the desired DVR name.

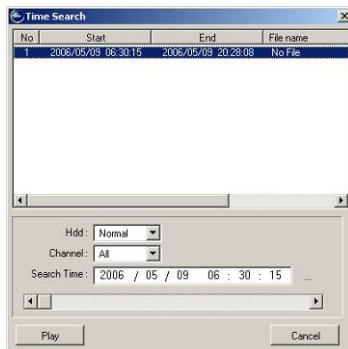
f. Remaining HDD space

Displays remaining hard disk drive space on the DVR.

g. Channel status

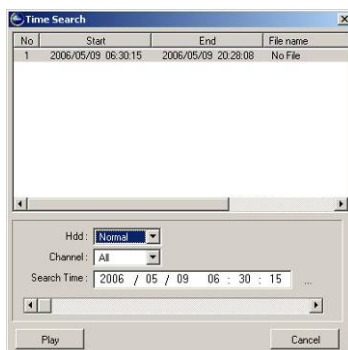
Displays the status of the live channels.

1.6.1 TIME SEARCH



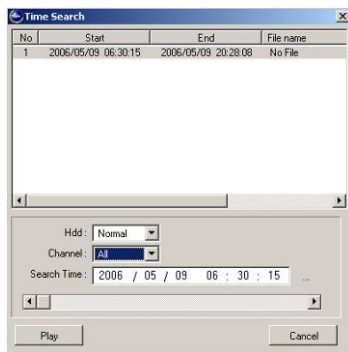
Click on TIME to display the Time Search window.

The start and the end of the recorded data will be displayed.

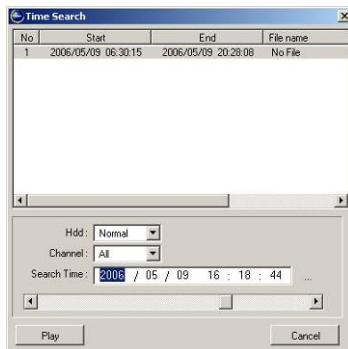


Select the hard disk drive for the remote playback. If unknown, leave the selection to Normal.

NETWORK VIEWER INSTALLATION



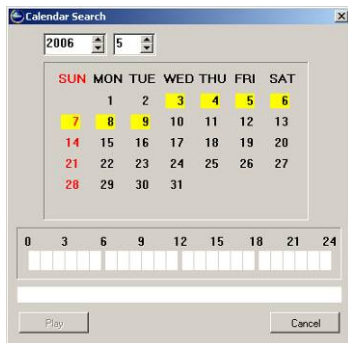
Select the channel for playback.



Select the year, month, day and time for the playback, or slide the time bar to the desired time.

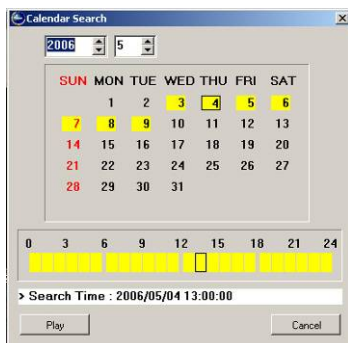
Click on PLAY to begin the remote playback.

1.6.2 CALENDAR SEARCH



Click on CALENDAR to display the Calendar Search window.

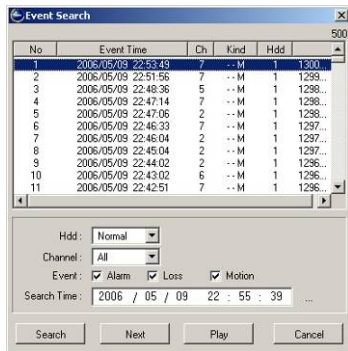
Dates with recorded data will be highlighted in yellow.



Select the year, month, date, and the hour block, and then click on PLAY to begin the remote playback.

NETWORK VIEWER INSTALLATION

1.6.3 EVENT

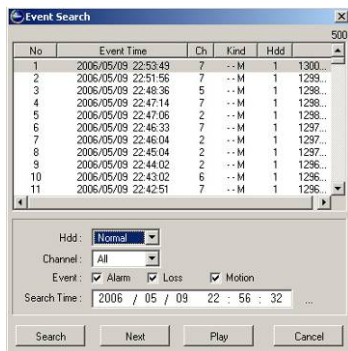


Click on EVENT to display the Event Search window.

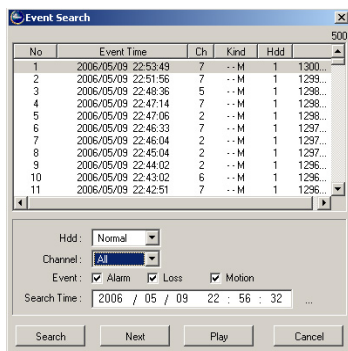
The first 500 events are listed chronologically, from the most recent to the oldest.

Select an event and then click on PLAY to begin remote playback.

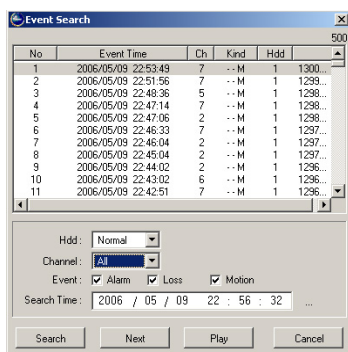
If the desired event is not listed in the current window, then follow the following steps.



Select the hard disk drive for the remote playback. If unknown, leave the selection to Normal.

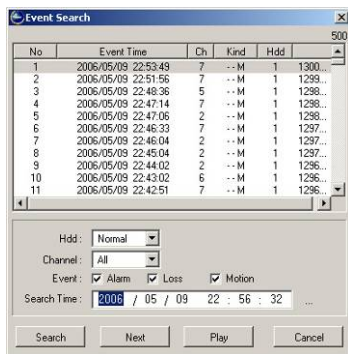


Select the channel for playback.



Select the event categories.

NETWORK VIEWER INSTALLATION

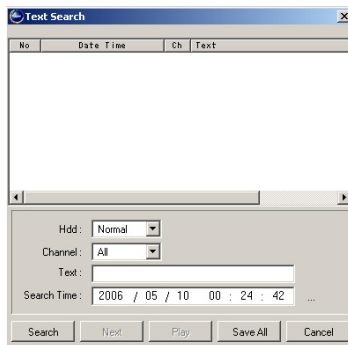


Select the year, month, day and time for the *end* of the event list for playback.

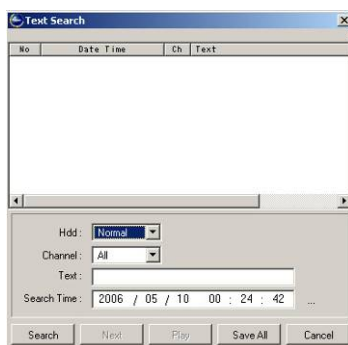


The list can be advanced to the next 500 lists by clicking on NEXT. Highlight the desired event and then click on PLAY to begin the remote playback.

1.6.4 TEXT

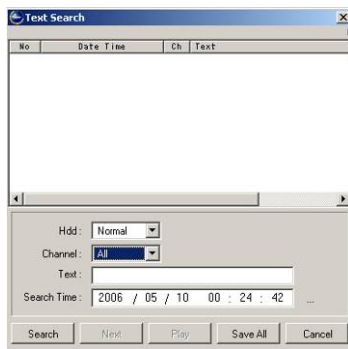


Click on TEXT to display Text Search window.

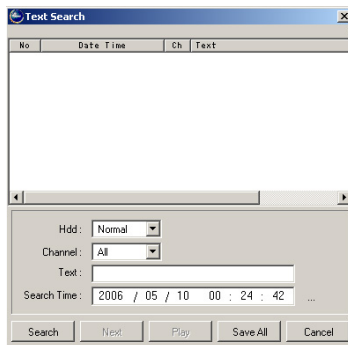


Select the hard disk drive for the remote playback. If unknown, leave the selection to Normal.

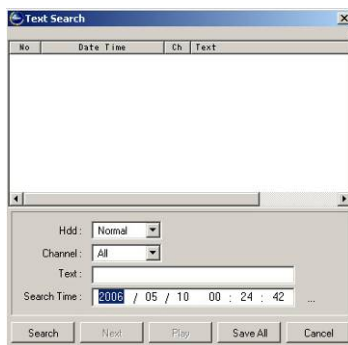
NETWORK VIEWER INSTALLATION



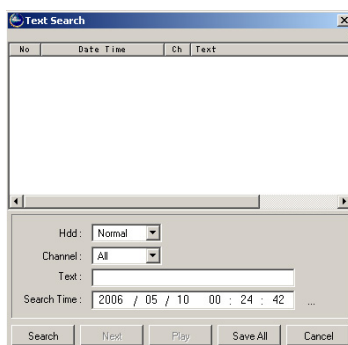
Select the channel for the text string search.



Enter the text string to search. Leave blank for a wild card (all items) search.



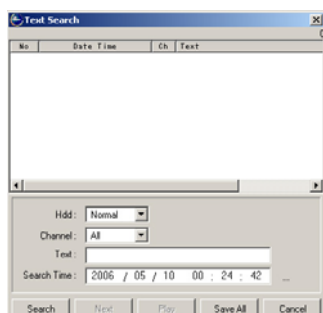
Select the year, month, day and time for the *end* of the search time.



Click on SEARCH to list data that match the text string.

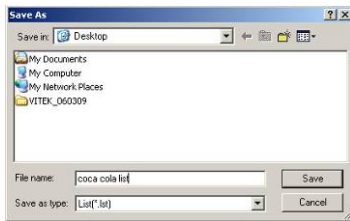
If the text string search was left blank, then it will display all items.

Click on NEXT for the next 500 listing.



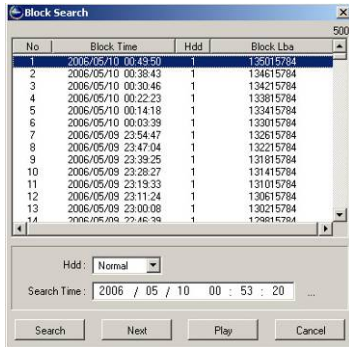
Highlight a text string, and then click on PLAY to begin the remote playback.

NETWORK VIEWER INSTALLATION



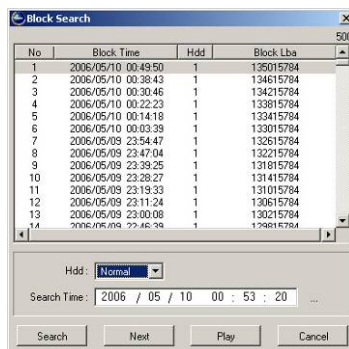
The listing can be saved as a List file format.

1.6.5 BLOCK

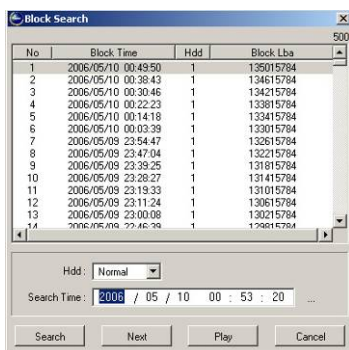


Click on BLOCK to display the Logical Block Address Search window.

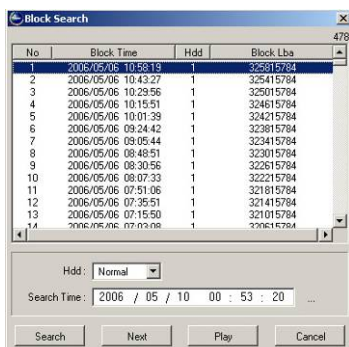
The first 500 data is displayed in chronological order, from the most recent to the oldest.



Select the hard disk drive for the remote playback. If unknown, leave the selection to normal.

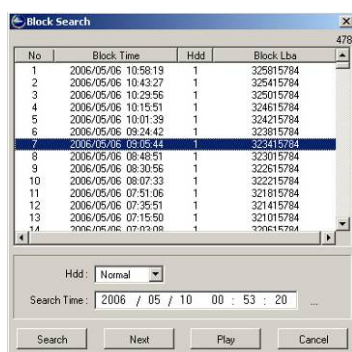


Select the year, month, day and time for the end of the data.



If the desired date and time is not found, then click on NEXT to display the next 500 Logical Block Addresses.

NETWORK VIEWER INSTALLATION



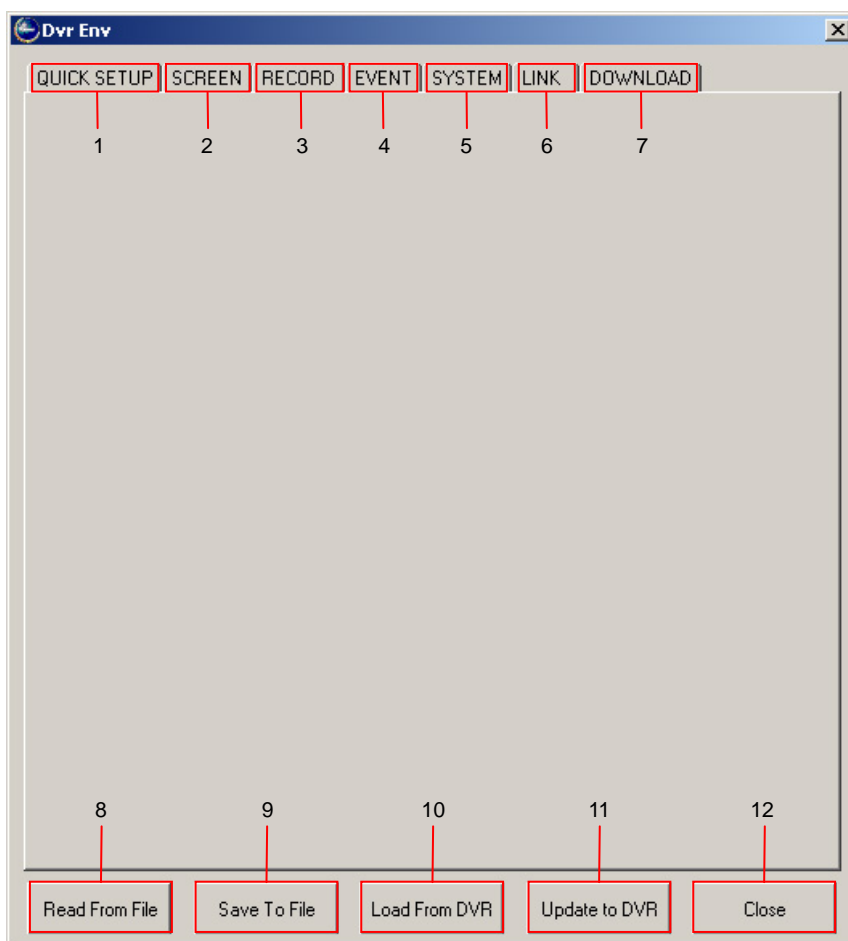
Highlight a desired block time and then click on PLAY to begin the remote playback.

1.7 DVR PLAYER – SETUP



The DVR Viewer can change the settings on the DVR remotely. The features and settings are identical to that of the DVR menu. For more information, please see V. DVR MENU on page

Click on SETUP and the password prompt will be displayed. Enter the administrator's password and then click on OK to display the DVR setup menu.



1. QUICK SETUP

2. SCREEN SETUP

3. RECORD SETUP

4. EVENT SETUP

5. SYSTEM SETUP

6. LINK

7. DOWNLOAD

Update the DVR's firmware using the download menu.

8. READ FROM FILE

Load DVR settings from a DVR setup file.

9. SAVE TO FILE

Save DVR settings to a DVR setup file.

10. LOAD FROM DVR

Load current DVR settings.

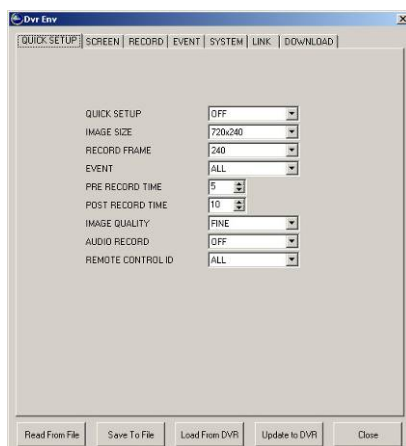
11. UPDATE TO DVR

Upload changed settings to DVR.

12. CLOSE

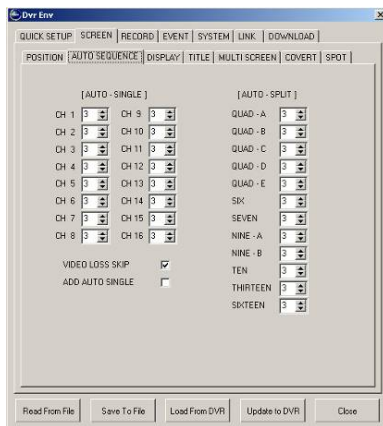
Close DVR Setup menu.

1.7.1 QUICK SETUP



- a. Quick Setup: on / off.
- b. Image Size: 360 x 240 / 720 x 240 / 720 x 480.
- c. Record Frame: 16 through 480, depending on image size.
- d. Event: off, all, alarm, v-loss, motion, alarm & loss, alarm & motion, loss & motion.
- e. Pre Record Time: 0 through 5 seconds.
- f. Pose Record Time: 0 through 60 seconds.
- g. Image Quality: low, fine, superfine.
- h. Audio Record: on / off.
- i. Remote Control ID: all, 11 ~ 14, 21 ~ 24, 31 ~ 34 and 41 ~ 44.

NETWORK VIEWER INSTALLATION

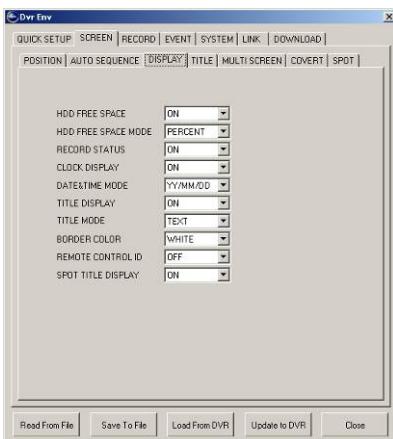


1.7.2 SCREEN

1.7.2.1 Auto Sequence

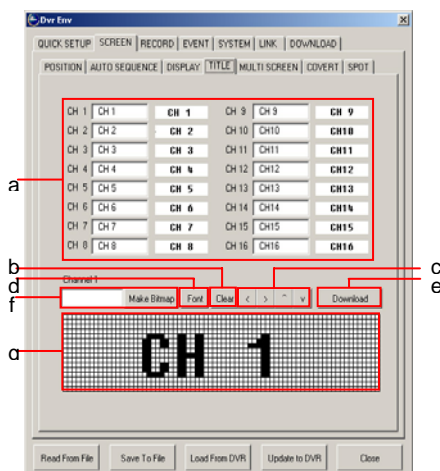
- Auto-Single: select the single channel dwell time.
- Auto-Split: select the multi channel dwell time.
- Video Loss Skip: check / uncheck.
- Add Auto Single: check / uncheck.

1.7.2.2 Display



- HDD Free Space: on / off.
- HDD Free Space Mode: percent / gigabyte.
- Record Status: on / off.
- Clock Display: on / off.
- Date & Time Mode: YY/MM/DD, MM/DD/YY, DD/MM/YY.
- Title Display: on / off.
- Title Mode: text / bitmap.
- Border Color: white / black.
- Remote Control ID: on / off.
- Spot Title Display: on / off.

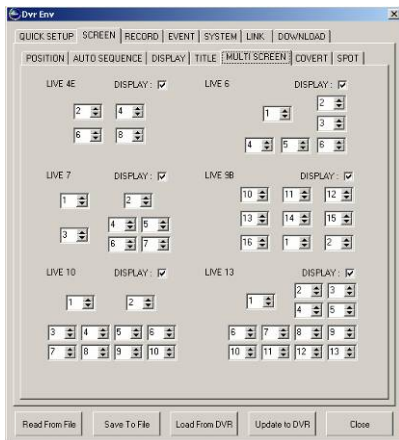
1.7.2.3 Title



- Channel Title (text mode)
Enter up to eight alphanumeric characters for channel titles.
- Clear
Clear the bitmap drawing.
- Move
Move the bitmap drawing in the grids.
- Font
Select the font for bitmap conversion.
- Download
Download the bitmap to the DVR.
- Make Bitmap
Enter the title to be converted into bitmap.
- Bitmap Grid
The title can be drawn here.

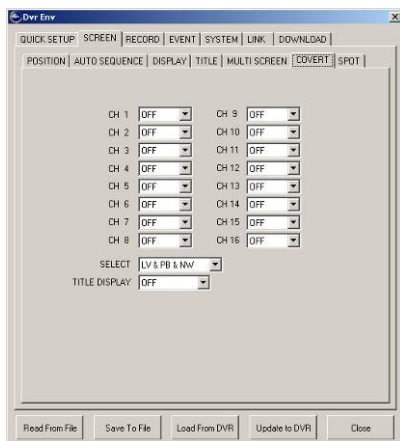
NETWORK VIEWER INSTALLATION

1.7.2.4 Multiscreen



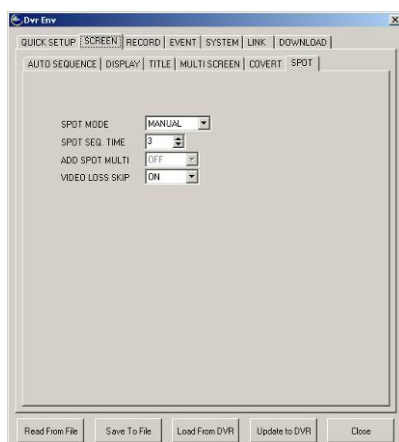
Customize the channels to be displayed in 4E, 6, 7, 9B, 10 and 13 channel view modes.

1.7.2.5 Covert



- Channels 1 through 16: on / off.
- Select: live, play, network, LV & PB, LV & NW, PB & NW, all.
- Title Display: on / off.

1.7.2.6 Spot

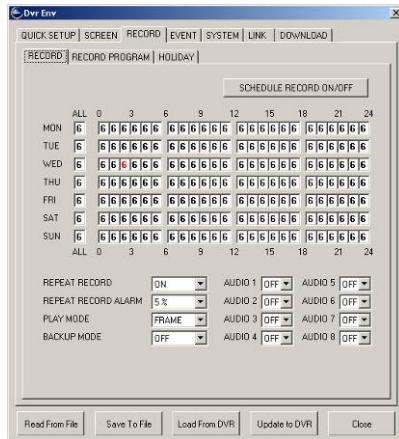


- Spot Mode: manual, event, sequence.
- Spot Sequence Time: 1 to 60 seconds.
- Add Spot Multi: disabled.
- Video Loss Skip: on / off.

NETWORK VIEWER INSTALLATION

1.7.3 RECORD

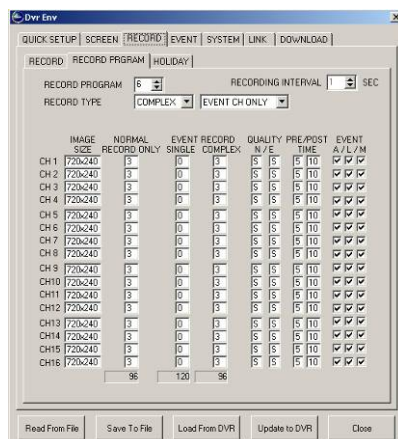
1.7.3.1 Record



- Schedule Record: click on a hour block and then click Schedule Record on / off.
- Monday through Sunday: select the record program.
- Repeat Record: on / off.
- Repeat Record Alarm: 5% through 10%, off.
- Backup Mode: mirror, event, off.
- Audio 1 through 8: on / off.

1.7.3.2 Record Program

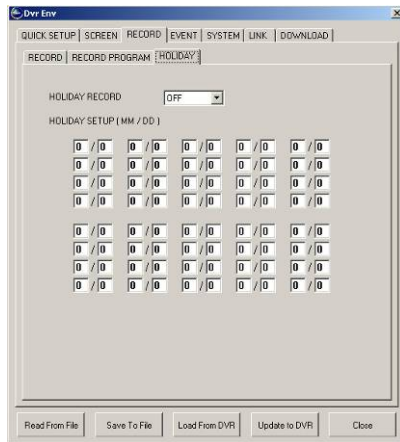
Define the values for the record settings. Use the mouse scroll button to change the values, or the left/right buttons on the keyboard.



- Record Program: 0 to 9.
- Record Type: single / complex, event channel only / all channels.
- Image Size: select the recording image size.
- Normal Record: select the recording rate for manual recording.
- Event Record Single: select the recording rate for single event recording.
- Event Record Complex: select the recording rate for complex event recording.
- Quality Normal: select the image quality for manual recording.
- Quality Event: select the image quality for event recording.
- Pre Record Time: select the pre-event recording time.
- Post Record Time: select the post-event recording time.
- Event Alarm / Video Loss / Motion: check / uncheck event recording options.

NETWORK VIEWER INSTALLATION

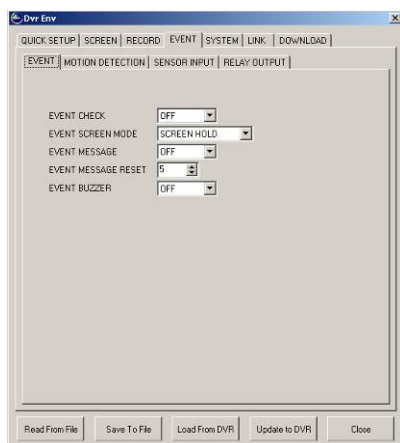
1.7.3.3 Holiday



- a. Holiday Record: on / off.
- b. Holiday Setup: enter the holidays.

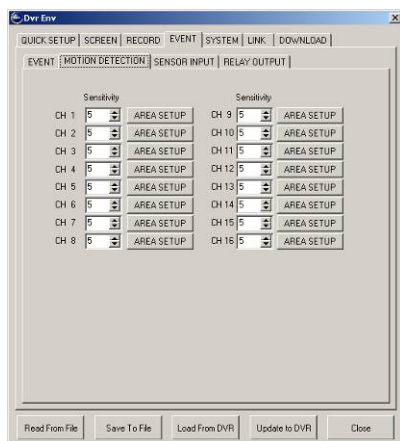
1.7.4 EVENT

1.7.4.1 Event



- a. Event Check: on / off.
- b. Event Screen Mode: screen hold, event full, event multi, event full return, event multi return.
- c. Event Message: on / off.
- d. Event Message Reset: 1 to 30 seconds.
- e. Event Buzzer: on / off.

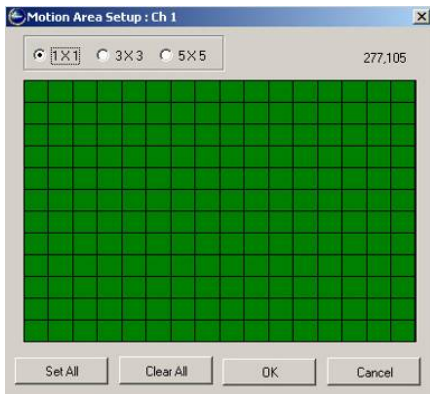
1.7.4.2 Motion Detection



- a. Sensitivity: select the motion detection sensitivity.
- b. Area Setup: click on AREA SETUP to display the motion grid window.

NETWORK VIEWER INSTALLATION

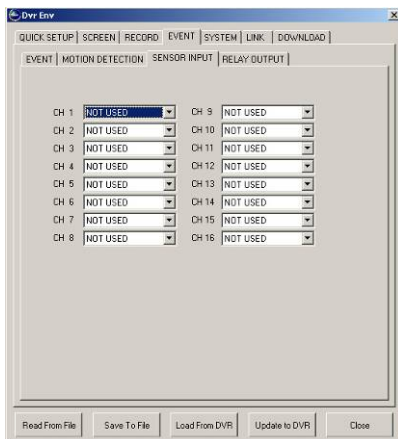
Select the grid size.



Use the left mouse button to draw motion detection area and use the right mouse button to erase motion detection area.

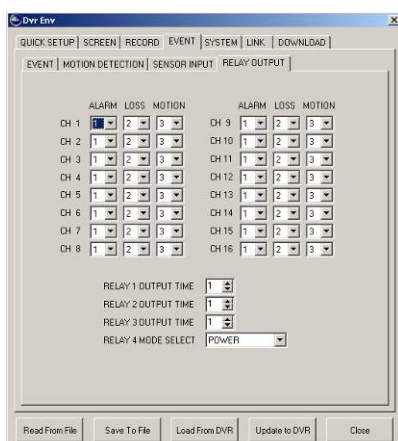
Use the buttons at the bottom of the screen to set or clear motion detection all area of the screen.

1.7.4.3 Sensor Input



Select the circuit type for the sensor input.

1.7.4.4 Relay Output

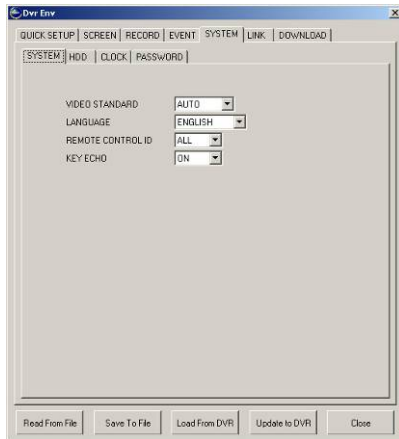


- Channel 1 through 16: select the relay output for the events.
- Relay 1 through 3 output time: 1 to 30 seconds.
- Relay 4 mode select: not used, HDD error, power, user.

NETWORK VIEWER INSTALLATION

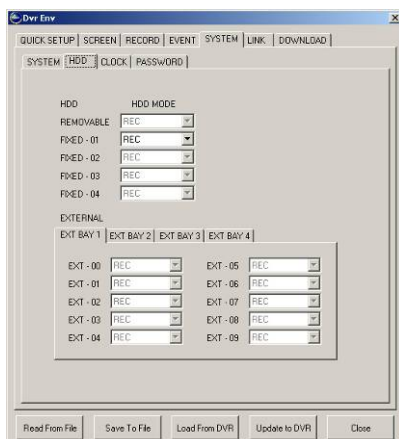
1.7.5 SYSTEM

1.7.5.1 System



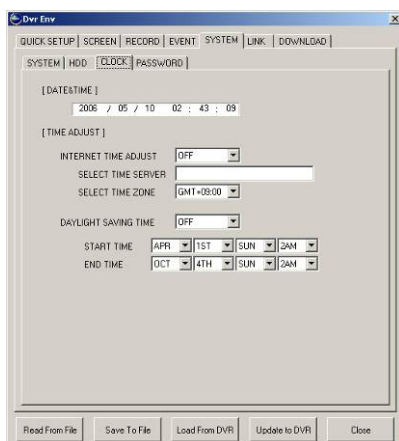
- a. Video Standard: PAL, NTSC, auto.
- b. Language: English, Korean, Japanese, Polish, Spanish, Russian and Chinese.
- c. Remote Control ID: All, 11 through 14, 21 through 24, 31 through 34 and 41 through 44.
- d. Key Echo: on / off.

1.7.5.2 HDD



Select the recording mode for the HDD.

1.7.5.3 CLOCK



- a. Date & Time: the date and time is displayed here cannot be modified.
- b. Internet Time Server: on / off.
- c. Select Time Server: enter the time server's IP address.
- d. Select Time Zone: select the DVR's local time zone.
- e. Day Light Savings Time: on / off.
- f. Start Time: select the month, week, day and time.
- g. End Time: select the month, week, day and time.

NETWORK VIEWER INSTALLATION

1.7.5.3 PASSWORD

The 'PASSWORD' tab in the 'Dvr Env' window contains the following settings:

- PASSWORD CHECK:** OFF
- NEW PASSWORD:** (empty field)
- RE - TYPE:** (empty field)
- ADMIN PASSWORD:** (empty field)
- USER1 PASSWORD:** (empty field)
- USER2 PASSWORD:** (empty field)
- USER3 PASSWORD:** (empty field)
- USER4 PASSWORD:** (empty field)
- AUTHORITY:** A table with columns for USER1, USER2, USER3, and USER4, and rows for various functions.

	USER1	USER2	USER3	USER4
REC	ON	ON	ON	ON
SEARCH/PLAY	ON	ON	ON	ON
COPY	ON	ON	ON	ON
LIVE AUDIO	ON	ON	ON	ON
DVR SETUP	ON	ON	ON	ON
DVR STATUS	ON	ON	ON	ON
PTZ CONTROL	ON	ON	ON	ON
POWER OFF	ON	ON	ON	ON

Buttons at the bottom: Read From File, Save To File, Load From DVR, Update to DVR, Close.

- Password Check: on / off
- Passwords: define the DVR access passwords for all users.
- Authority: define DVR access authority for users 1 through 4.

1.7.6 LINK

1.7.6.1 Network

The 'NETWORK' tab in the 'Dvr Env' window contains the following settings:

- DHCP:** OFF
- IP ADDRESS:** 192 . 168 . 1 . 4
- SUBNET MASK:** 255 . 255 . 255 . 0
- GATEWAY:** 192 . 168 . 0 . 1
- DNS:** 0 . 0 . 0 . 0
- PORT:** 5400
- DYNAMIC IP SERVER:** 211.174.251.155
- BACKUP IP SERVER:** 211.174.251.160

Buttons at the bottom: Read From File, Save To File, Load From DVR, Update to DVR, Close.

- DHCP: on / off.
- IP Address: enter the IP address.
- Subnet Mask: enter the subnet mask.
- Gateway: enter the gateway.
- DNS: enter the DNS address.
- Port: define port number.
- Dynamic IP Server: enter the Dynamic IP Server address.
- Backup IP Server: enter backup IP Server address.

1.7.6.2 RS-232C

The 'RS232C' tab in the 'Dvr Env' window contains the following settings:

- BAUD RATE:** 115200
- DATA BIT:** 8
- PARITY BIT:** NONE
- STOP BIT:** 1

Buttons at the bottom: Read From File, Save To File, Load From DVR, Update to DVR, Close.

- Baud Rate: select the communication speed.
- Data Bit: select the data bit.
- Parity Bit: select the parity bit.
- Stop Bit: select the stop bit.

NETWORK VIEWER INSTALLATION

1.7.6.3 RS-485

- System ID: select the system ID.
- Output Mode: select the output mode.
- Baud Rate: select the communication speed.
- Data Bit: select the data bit.
- Parity Bit: select the parity bit.
- Stop Bit: select the stop bit.

1.7.6.4 PTZ

- Model: select the PTZ camera model.
- Speed: select the communication speed.
- ID: select the PTZ camera address.

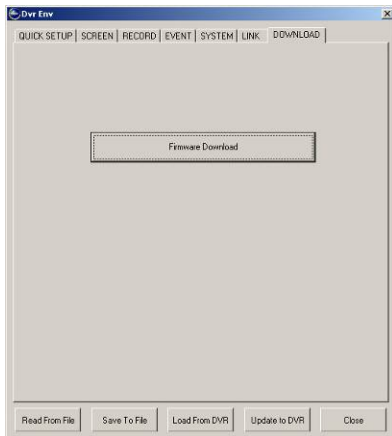
1.7.6.5 E-mail

- Send e-mail: on / off.
- SMTP Server: enter the SMTP server address.
- DVR e-mail Address: enter the DVR's e-mail address.
- User ID: enter the DVR's user name for the e-mail account.
- Password: enter the DVR's password for the e-mail account.
- E-mail addresses 1 through 10: enter the e-mail addresses for e-mail notification.

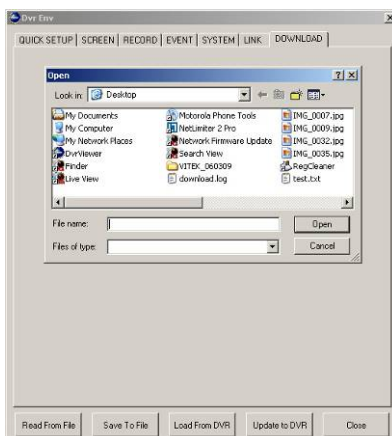
NETWORK VIEWER INSTALLATION

1.7.7 DOWNLOAD

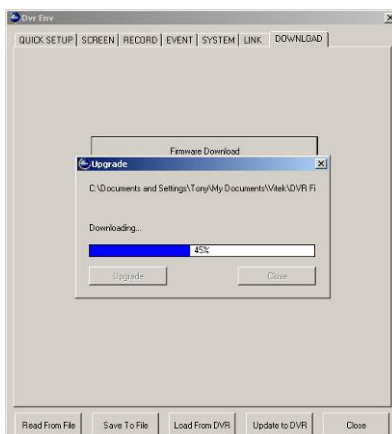
The DVR's firmware can be updated from the client software. Please remember that once the upgrade process begins, the connection must not be severed or interrupted.



Click on FIRMWARE DOWNLOAD, and the DVR firmware open window will open.

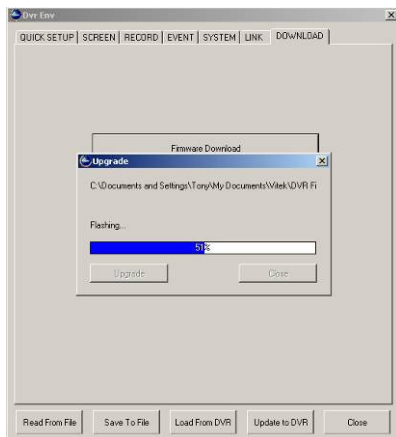


Locate the upgrade file and then click on OPEN to begin the upgrade process.

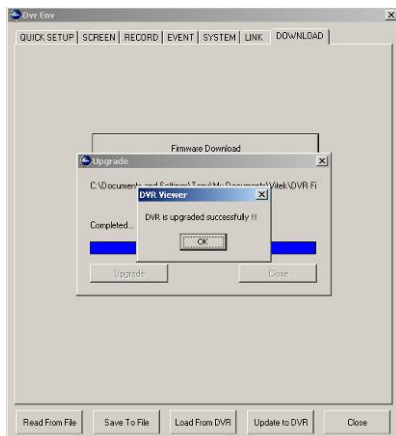


The file will begin loading onto the DVR.

NETWORK VIEWER INSTALLATION



Once the download is complete, the DVR will begin flashing the new firmware.



Once the upgrade is finished and successful, the DVR viewer will display “DVR Upgraded Successfully!!”

Restart the DVR, and the new firmware will be in effect.

APPENDIX

APPENDIX

TIME ZONE LISTING

GMT-12:00	International Date Line West
GMT-11:00	Midway Island, Samoa
GMT-10:00	Hawaii
GMT-09:00	Alaska
GMT-08:00	Pacific Time (US & Canada); Tijuana
GMT-07:00	Arizona
GMT-07:00	Chihuahua, La Paz, Mazatlan
GMT-07:00	Mountain Time (US & Canada)
GMT-06:00	Central America
GMT-06:00	Central Time (US & Canada)
GMT-06:00	Guadalajara, Mexico City, Monterrey
GMT-06:00	Saskatchewan
GMT-05:00	Bogota, Lima, Quito
GMT-05:00	Eastern Time (US & Canada)
GMT-05:00	Indiana (East)
GMT-04:00	Atlantic Time (Canada)
GMT-04:00	Caracas, La Paz
GMT-04:00	Santiago
GMT-03:30	Newfoundland
GMT-03:00	Brasilia
GMT-03:00	Buenos Aires, Georgetown
GMT-03:00	Greenland
GMT-02:00	Mid-Atlantic
GMT-01:00	Azores
GMT-01:00	Cape Verde Island.
GMT	Casablanca, Monrovia
GMT	Greenwich Mean Time: Dublin, Edinburgh, Lisbon, London
GMT+01:00	Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna
GMT+01:00	Belgrade, Bratislava, Budapest, Ljubljana, Prague
GMT+01:00	Brussels, Copenhagen, Madrid, Paris
GMT+01:00	Sarajevo, Skopje, Warsaw, Zagreb
GMT+01:00	West Central Africa
GMT+02:00	Athens, Beirut, Istanbul, Minsk
GMT+02:00	Bucharest
GMT+02:00	Cairo
GMT+02:00	Harare, Pretoria
GMT+02:00	Helsinki, Kyiv, Riga, Sofia, Tallinn, Vilnius
GMT+02:00	Jerusalem
GMT+03:00	Baghdad
GMT+03:00	Kuwait, Riyadh
GMT+03:00	Moscow, St. Petersburg, Volgograd

GMT+03:00	Nairobi
GMT+03:30	Tehran
GMT+04:00	Abu Dhabi, Muscat
GMT+04:00	Baku, Tbilisi, Yeveran
GMT+04:30	Kabul
GMT+05:00	Ekaterinburg
GMT+05:00	Islamabad, Karachi, Tashkent
GMT+05:30	Chennai, Kolkata, Mumbai, New Delhi
GMT+05:45	Kathmandu
GMT+06:00	Almaty, Novosibirsk
GMT+06:00	Astana, Dhaka
GMT+06:00	Sri Jayawardenepura
GMT+06:30	Rangoon
GMT+07:00	Bangkok, Hanoi, Jakarta
GMT+07:00	Krasnoyarsk
GMT+08:00	Beijing, Chongqing, Hong Kong, Urumqi
GMT+08:00	Irkutsk, Ulaan Bataar
GMT+08:00	Kuala Lumpur, Singapore
GMT+08:00	Perth
GMT+08:00	Taipei
GMT+09:00	Osaka, Sapporo, Tokyo
GMT+09:00	Seoul
GMT+09:00	Yakutsk
GMT+09:30	Adelaide
GMT+09:30	Darwin
GMT+10:00	Brisbane
GMT+10:00	Canberra, Melbourne, Sydney
GMT+10:00	Guam, Port Moresby
GMT+10:00	Hobart
GMT+10:00	Vladivostok
GMT+11:00	Magadan, Solomon Island, New Caledonia
GMT+12:00	Auckland, Wellington
GMT+12:00	Fiji, Kamchatka, Marshal Island
GMT+13:00	Nuku'alofa