



**Users Manual - Server / Client
For Models 4XXXP, 5XXXP, 6XXXP Series**

**Required!
Read BEFORE Installing Unit!**

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FCC Class A

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



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1. Safety Information

 You should pay attention to these following information before installing DVR.

WARNING

- ◆ Do not expose the product directly to the sun or a heating apparatus.
- ◆ Do not expose to rain or extreme humid or dirt environment .
- ◆ Keep the product away from tremor or any magnetic devices.
- ◆ Do not install the product to extremely cold area.
- ◆ Pay attention not to slip an electronic conductor into the groove of the product for ventilation.
- ◆ Turn off the Power before installation.
- ◆ Do not open the cover of the product at your disposal.
- ◆ Install the product to a well-ventilated area.
- ◆ This product generates, uses and can radiate radio frequency energy.
So, if not installed and used in accordance with the instruction manual, may cause interference to radio communication.

FCC Label(Part 15 sec. 15.19)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions : (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operations.



2. System Installation

2.1 Installation of the system

Thank you for choosing DVR

This manual includes details on :

- 1) Appearance and name of DVR
- 2) How to install the system
- 3) How to setup the program of the system
- 4) How to operate the program of the system

Before installation, become familiar with all the special features and warning associated with this equipment and read this manual carefully. Once the installation is completed, save this manual for future reference.

The installation of this product should be made by qualified service personnel and confirmed to all local codes. If you have any question or if service seems necessary, contact your vendor or Kaltec Electronics. You must obtain a RMA number and shipping instructions before returning any product for service.

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2.2 Removing Package

After removing the system package, place the system where you want to install (Pay attention to safety information before installation). When you remove the package, check for missing items.

- Body (DVR)
- A power supply cable
- User's manual
- Communication converter : RS232C ⇔ RS422 or RS485 (Option)
- Keyboard, Mouse and accessory kit
- Microsoft Windows 98 license

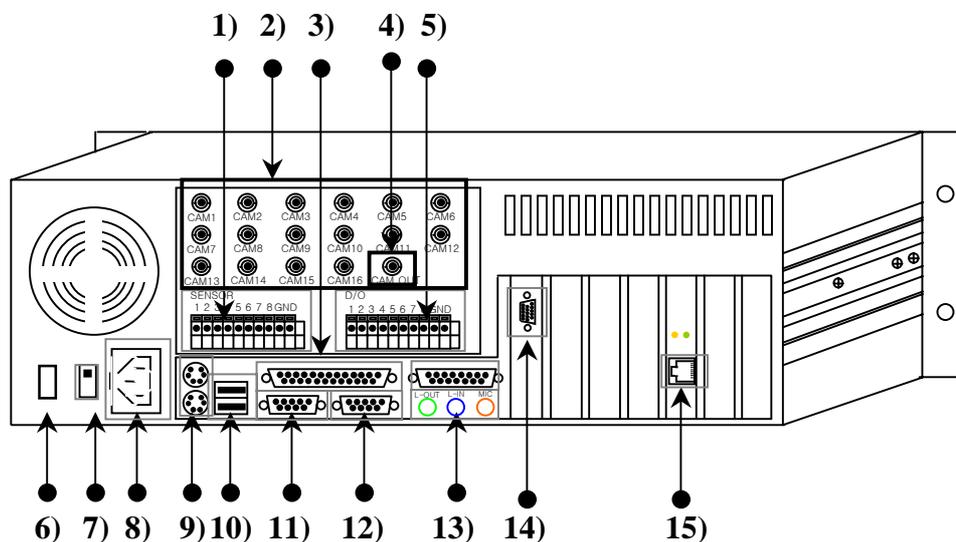


DVR Body



Power supply cable for AC

2.3 Rear panel of the system



1) Sensor Input and COM terminals

8- input ports and 2 COM terminals for sensor signals.

2) Camera Input connectors

BNC input connectors for cameras.

3) Printer connector

Connector for peripheral printer devices.

4) Video Composite Output connectors

BNC output connectors for CCTV monitor

5) Alarm Output and COM terminals

8-output ports and 2 COM terminals for alarm signal.

6) AC power on/off switch

7) AC power VAC switch

Dip switch is for a 115/230 VAC.

8) AC power input socket.

9) PS/2 sockets

The sockets for keyboard and mouse

10) USB connector (Future Use)

11) COM1 connectors

This connector for PTZ devices.

12) COM2 connector

This connector for other devices such as external modem.

13) Audio connectors

It's not available in the DVR

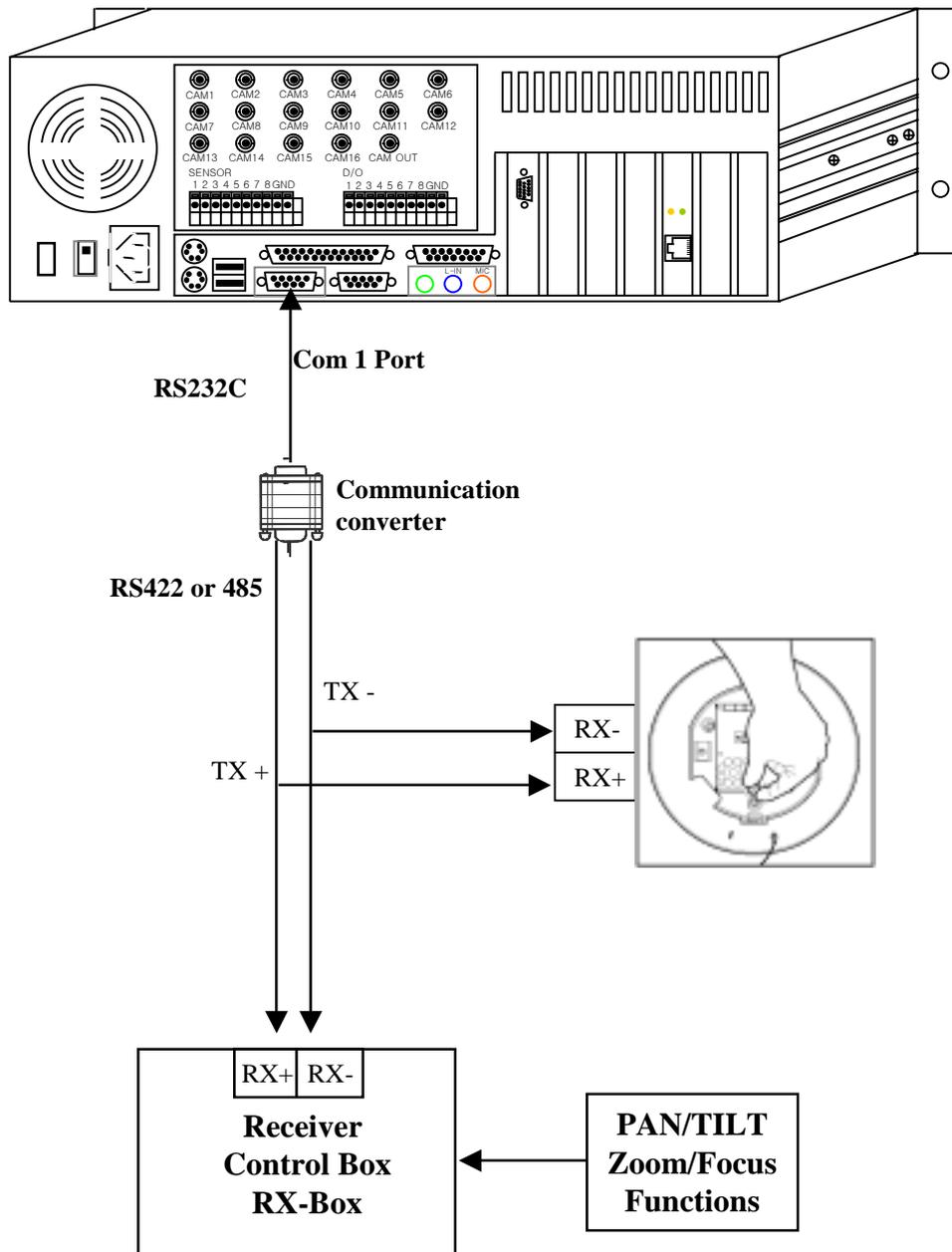
14) VIDEO OUT connector

This connector for PC monitor.

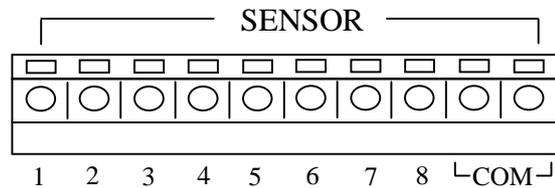
15) LAN connector

Interface for TCP/IP communication.

2.4 How to install PTZ & Dome Camera



2.5 How to connect to Outer Sensor

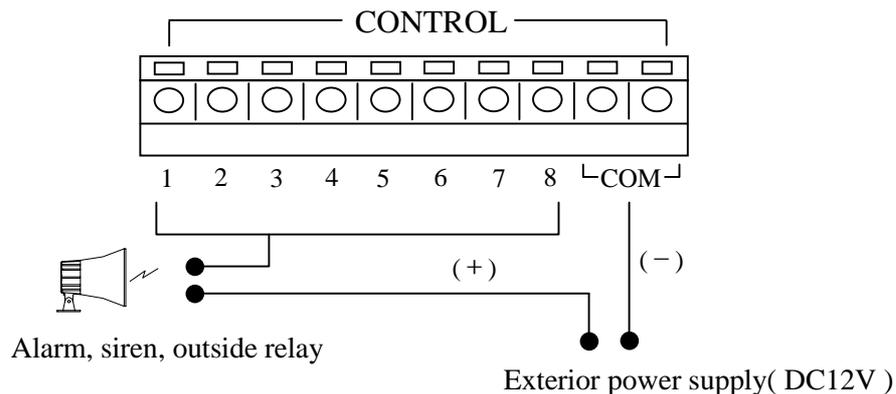


Connect one signal line(or two line) of all sorts of sensor(infrared rays sensor, thermic rays sensor, magnetic sensor) to the com port of the body and connect the other sensor signal line to the desired sensor number.

☞ “NC(Normal Close) TYPE sensor is available”

⚠ Use another DC ADAPTER(Power supply) for the all sorts of sensor power supply.

2.6 How to connect to Control Output

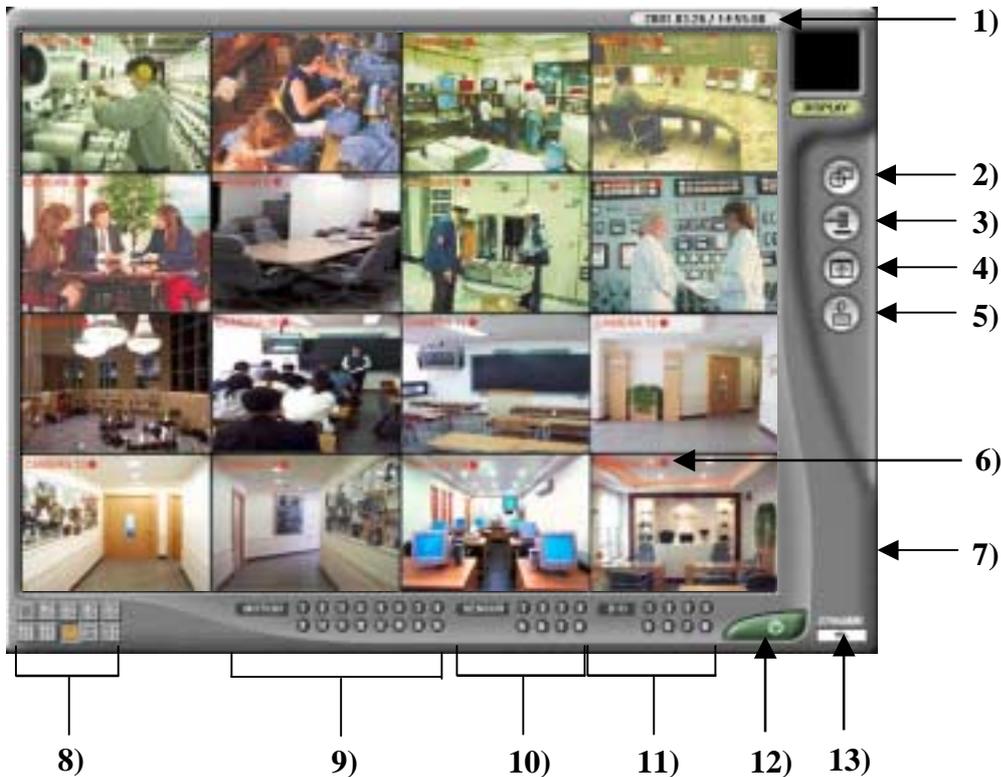


⚠ Only use below 12V, 300mA Voltage.
When controlling electric lamp and other devices, use and control outside relay.

3. Display Mode

This mode displays real-time image coming from cameras and basic mode to enter search, setup and PAN/TILT control mode.

3.1 Main Screen



1) **Current date, time Indicator** - It indicates the current date and time of the system

2) **Search button** - Click this button to search the recorded image data

3) **Setup button** - Click this button to access the system configuration

4) **PAN/TILT Control button** - Click to this button to go to the PAN/TILT mode

5) **Backup button** - Click this button to back up the stored image data on other backup media

6) **Camera recording status** - It indicates the camera recording status on the screen

Continuous - ● (red)	Motion Detection - ● (blue)
Sensor Input - ● (yellow)	Display - ○ (clear))

7) **Modem Connection Server** – It is displayed only when modem is installed

8) **Screen division button** - Click to select the screen division

9) **Motion detection status indicator** - It is lit when motion detection is occurred.

10) **Sensor status indicator** - It is lit when sensor is triggered

11) **Digital Output** – Access button to control output relay (alarm)

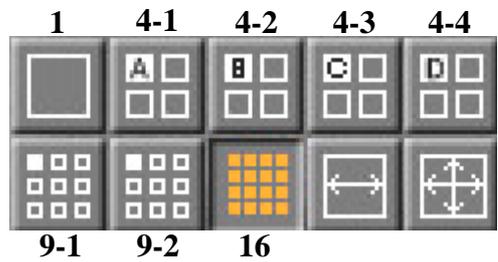
12) **Exit button** - Click this button to terminate the system

13) **HDD usage Indicator** - It indicates how much recording space is used and how much is available

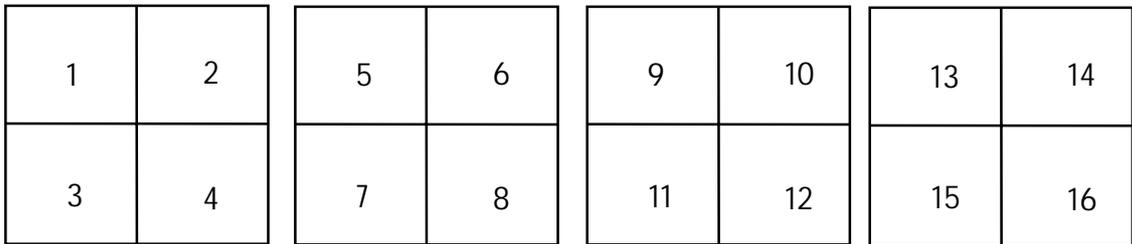
3.2 Controlling Screen Division

When you click the screen division button on bottom of main screen, screen format will be changed.

※ **Screen division button**



DVR displays up to 16 channels. And screen division function that it provides is following

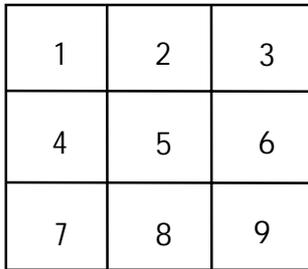


(4-1)

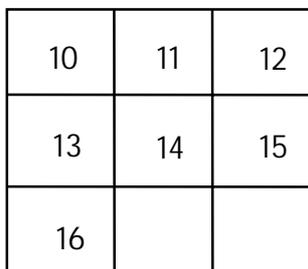
(4-2)

(4-3)

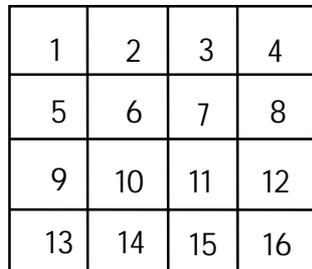
(4-4)



(9-1)



(9-2)



(16)



DVR 4 displays up to 4 channels and 8 displays up to 8 channels



Click this button to enlarge full screen and to hide the other functional buttons on the screen. Click the right mouse button to return the original screen mode.



For single full screen, select the desired image of channel in screen division mode. Click the left mouse button, single full screen appears.

☞ One more click to return the original screen mode.



To hide the other functional buttons, click the right mouse button on the screen in the single full screen or multi-screen mode.

☞ Click the right mouse button to return the original screen mode.

※ Auto Switching button



When you click this auto switching button, the divided screen will be switched automatically in order. You can set the switching time in the Speed setup.

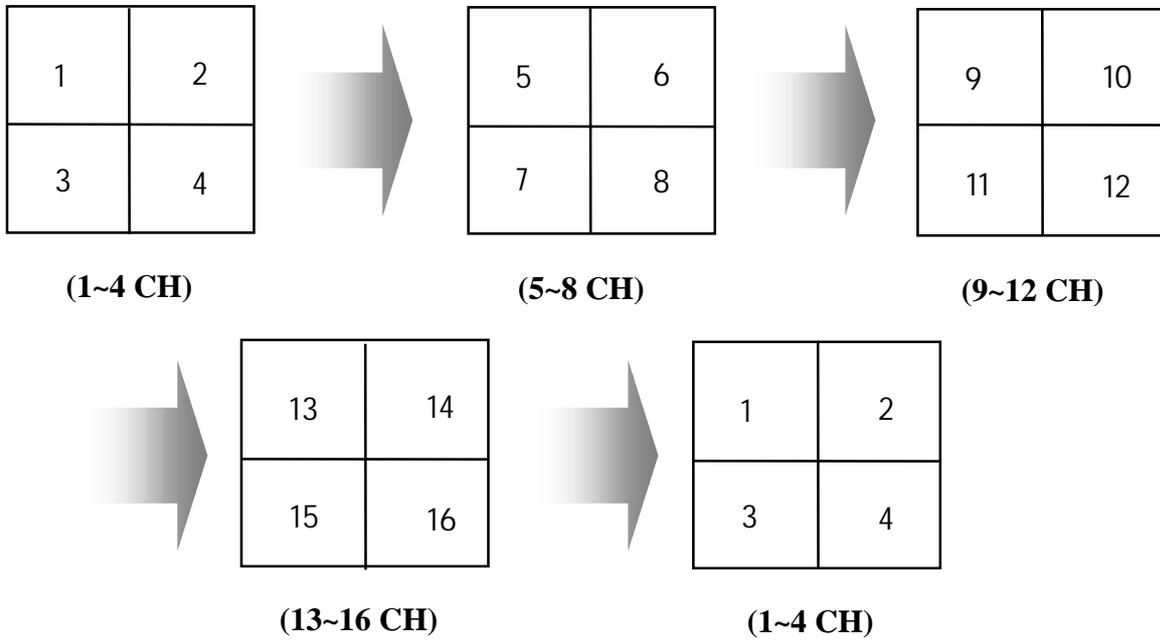
➤ To use Auto Switching function

1. Select the desired screen division in the screen division button
2. Click the Auto Switching button
3. Screen will be switched automatically according to switched speed time in Speed setup
4. In order to stop the auto switching, click the Auto Switching button.
5. In Net DVR-Special 4 (4CH version), Auto Switching works for 1 CH division
In Net DVR-Special 8 (8CH version), Auto Switching works for 1, 4 CH division.
In Net DVR-Deluxe *Plus* (16CH version), Auto Switching works for 1, 4, 9 CH division.

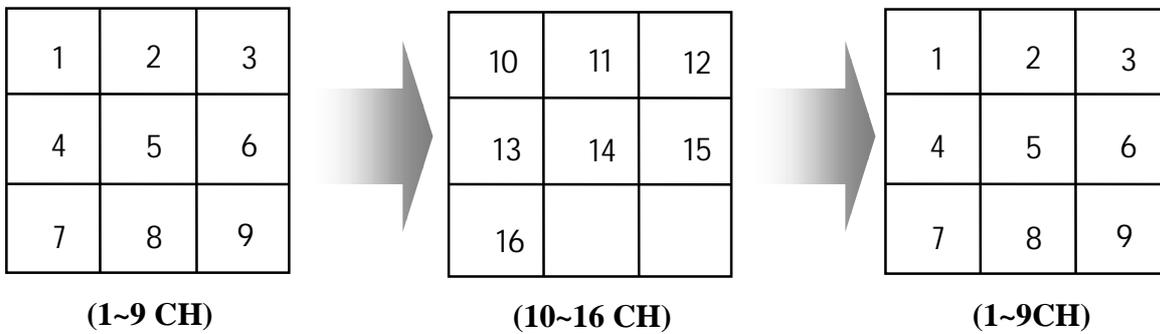
▪ 1 division auto switching function



▪ **4 division auto switching function**



▪ **9 division auto switching function**

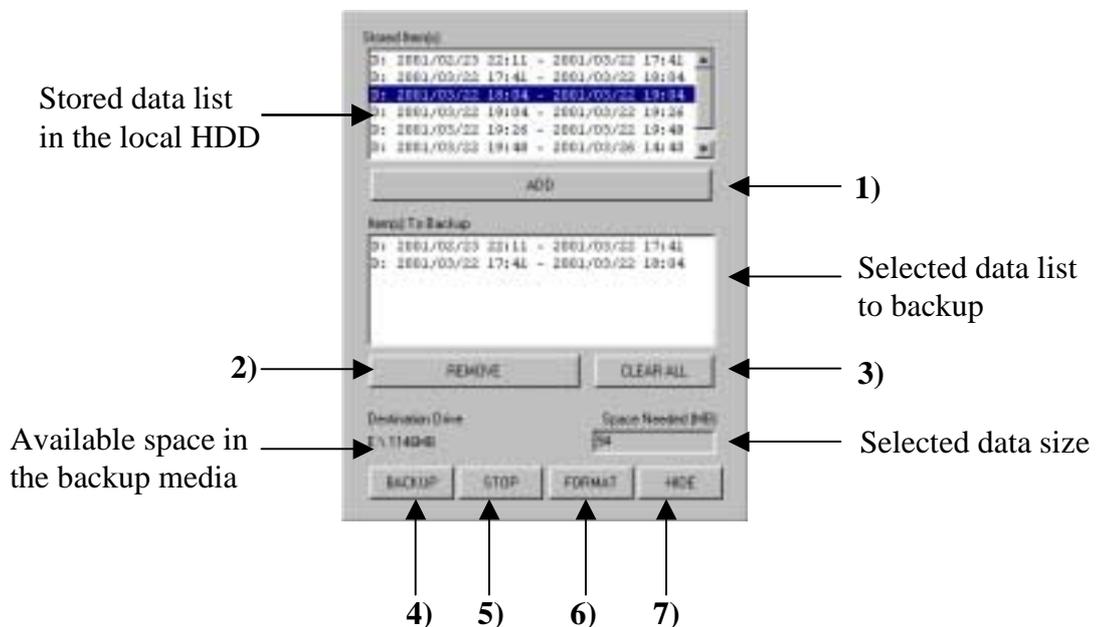


3.3 Backup (optional)



When you click backup button, following backup window appears. It supports DVD and DAT as manual backup. To move the restored image data on H.D.D to the other backup media, use this function.

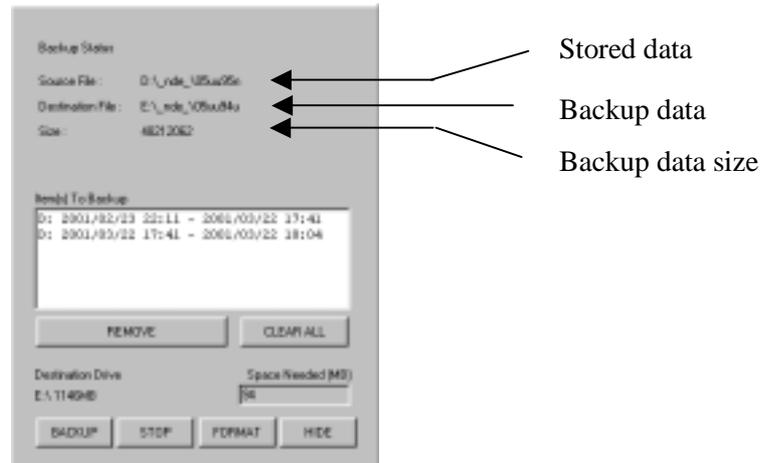
! You should check backup and select backup media (DVD or DAT) in the Speed setup before starting backup (DVD or DAT driver and program should be installed). Once you select backup, you are not able to use Duplex mode.



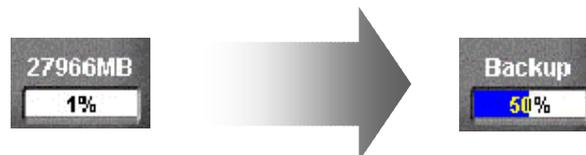
- 1) **Add** - Add the selected data in the backup list
- 2) **Remove** - Remove the selected backup data
- 3) **Clear All** - Clear all data in the backup data list
- 4) **Backup** - Click to start backup
- 5) **Stop** - Click to stop backup
- 6) **Format** - Click to format the backup media
- 7) **Hide** - Click to hide the backup menu

➤ **To back up in the backup media**

1. Select the desired data.
2. Click the Add button to add the desired data. Click to Remove button to erase the data.
3. Click the start button. Then backup screen is changed as belows.



◆ During backup, HDD indicator will be changed to backup indicator automatically



⚠ **You are not able to backup if the selected data size is over the media space.**

4. PAN/TILT Control Mode

If PAN/TILT is installed a camera, you can control a camera at your disposal. You can adjust the camera up/down/left/right, Zoom In/Out and Focus In/Out. Also you can use Auto function and preset function depending on PAN/TILT receiver type.



If you click PAN/TILT Control button, PAN/TILT Control mode appears automatically.

4.1. PAN/TILT Control



1) **Focus** - Press + and - button to adjust Focus In/Out

2) **Zoom** - Press + and - button to adjust Zoom In/Out

3) **Camera** - Click to enable or disable the PAN/TILT camera

4) **Light** - Click to turn on/off the power of external light

5) **Auto** - Click to move the camera in order automatically as you set in advance

6) **Control** - Press arrow button to move the camera left/right/up/down

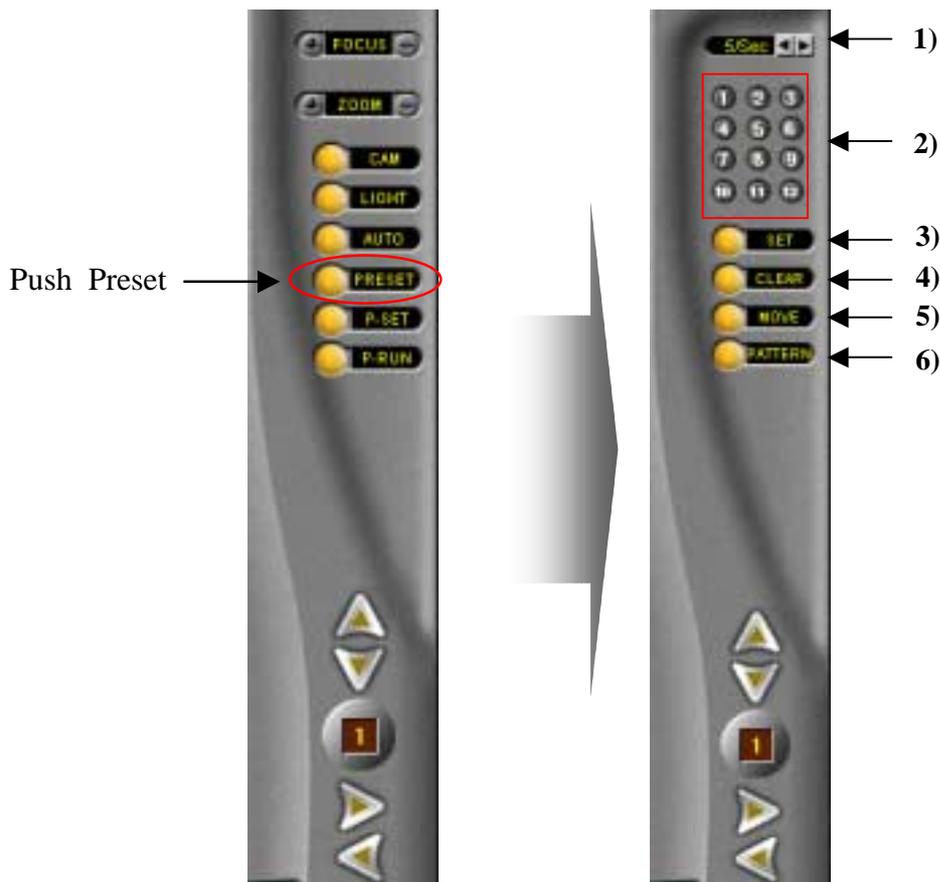
※ The number in the middle of button is the selected camera number

4.2. Pelco Spectra(D-Protocol) Preset Function

Preset function enables a camera to move the location which you set in advance.

When you press preset button, functional button will be changed as bellows

! If a dome controller(Pelco Spectra : D-Protocol) is connected, you can use Preset function



- 1) **Move Delay Time** – Duration time between preset positions in the auto-tour function
- 2) **Preset Number** – Position number allocated by the preset setting
- 3) **Set** - Save a position at preset number. To move a direction, click set button and choose preset number that you want
- 4) **Clear** - Delete Preset location
Click clear button and choose preset number that you want to delete)
- 5) **Move** - Move the dome as you set in advance
Click move button and choose preset number
- 6) **Pattern** - Click Patten button then click Set button and program pattern in a order.
To use pattern function, release set button and click pattern and move button.
Then camera will move as a pattern.
To delete pattern function, press pattern and clear button

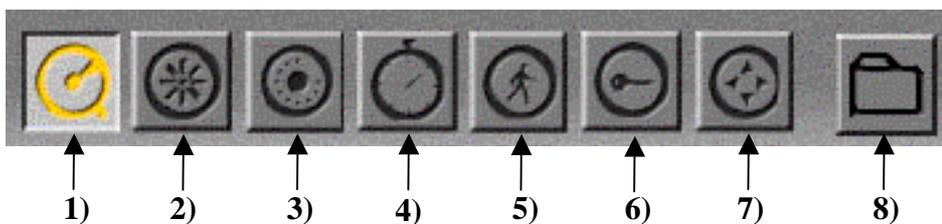
5. Setup Mode

When you press Setup button in display mode, Channel setup picture appears.



 **If you set up password in the Password setup, you should enter the password to go to the Setup mode. When the password is authorized, Channel setup picture appears.**

Choose the function button you want to set up by clicking following button.



- 1) **Channel Setup** – Click to configure the camera setting
- 2) **Color Setup** – Click to configure the color setting of camera
- 3) **Schedule Setup** – Click to configure the recording schedule of camera
- 4) **Speed Setup** – Click to configure the recording speed of camera
- 5) **Motion Detection Setup** - Click to configure the motion detection of camera
- 6) **Password Setup** – Click to configure the password of system
- 7) **PAN/TILT Setup** - Click to configure the PAN/TILT control
- 8) **EXIT button** – Click to go to windows explorer



Press Exit button to return the Display mode.

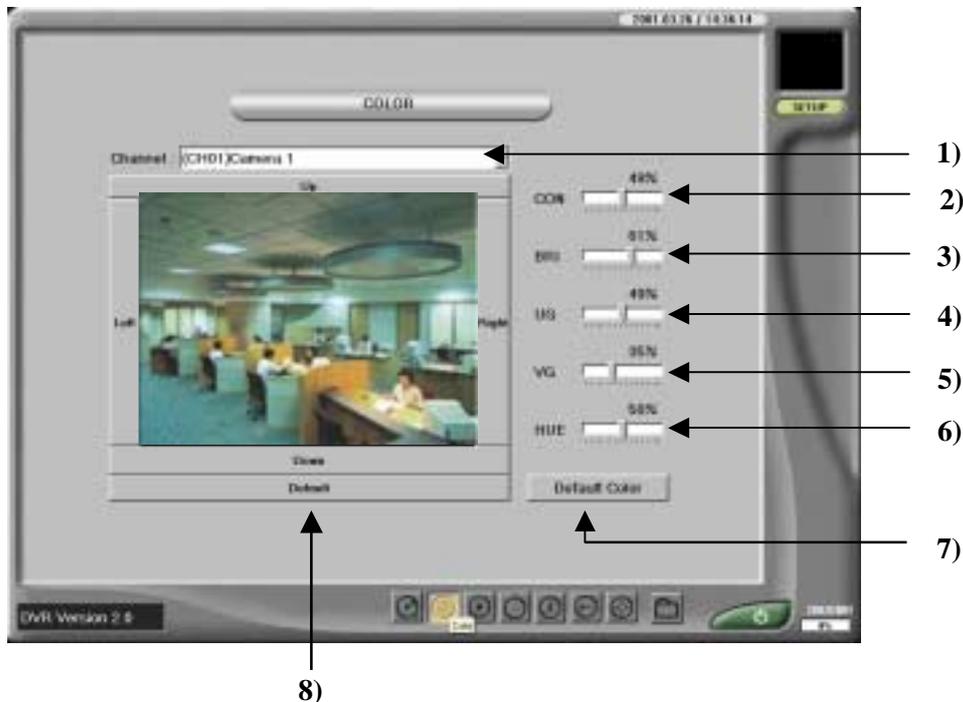
5.1. Channel Setup



↑
Software Version

- 1) **Channel Name** - Type the place name where each camera is installed after clicking camera selection button.
- 2) **Camera Selection** - Select the specific camera which you want to use.
- 3) **Camera Enable/Disable** - Click to enable or disable the specific camera

5.2 Color Setup

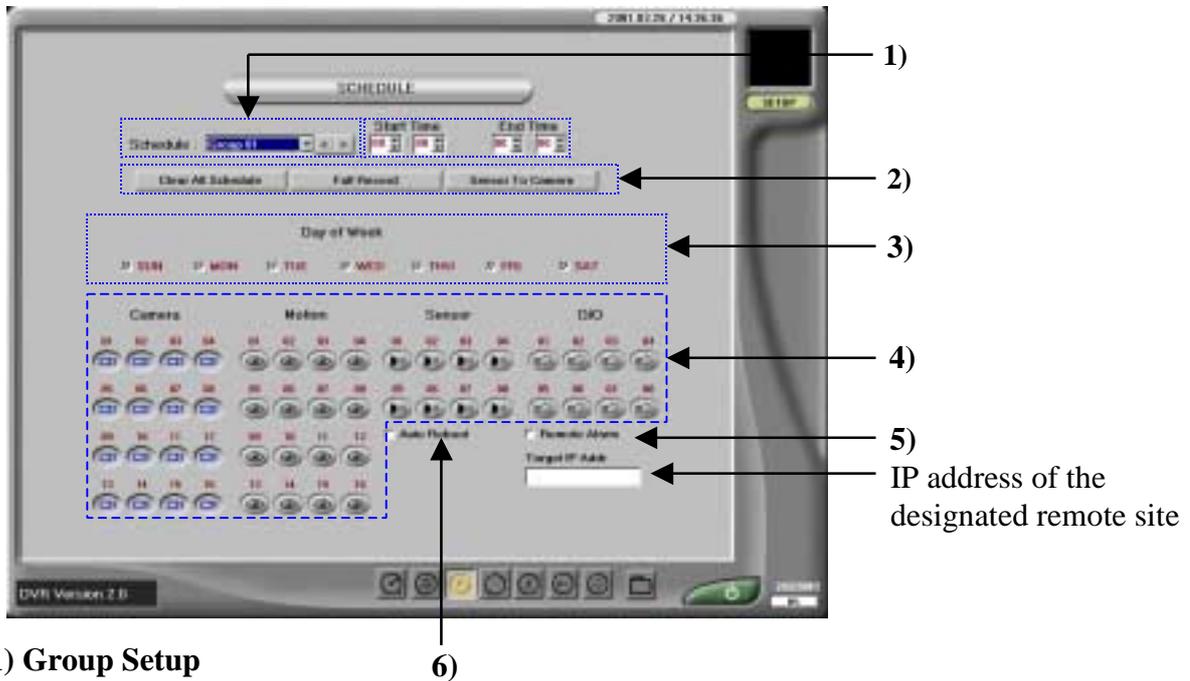


- 1) **Channel** - Select the specific camera
- 2) **Contrast** - Move the bar to adjust the contrast of displayed and recorded images
- 3) **Brightness** - Move the bar to adjust the brightness of displayed and recorded images
- 4) **U-Gain** - Move the bar to adjust red color of displayed and recorded images
- 5) **V-Gain** - Move the bar to adjust green color of displayed and recorded images
- 6) **Hue** - Move the bar to adjust blue color of displayed and recorded images
- 7) **Default Color** - Click to return color adjustment into Default Color
- 8) **Camera Control** - Press arrow button (up/down/left/right) to make image fit as required



When you use Black/White Camera, you must set the value of UG and VG as 0%

5.3 Schedule Setup



1) Group Setup

1-1) Schedule - Select the group number. 24 schedule groups are available with camera, sensor and motion.

1-2) Start Time - Click up/down arrow button to select the desired hour and minutes of each group

1-3) End Time - Click up/down arrow button to select the desired hour and minutes of each group

2) Macro Setup

1-1) Clear All Schedule - Click to delete all schedule group configuration

1-2) Full Record - Click to set all camera to continuous recording everyday

1-3) Sensor to Camera - Click to set sensor recording from camera #1 to #8 using the group 1,2,3....8

3) Day of week - Check the desired recording day for each group.

4) Recording Type - Click to enable the desired camera button, motion button and sensor button depending on recording mode

4-1) Camera - Click to camera button to record image continuously

4-2) Motion Detection - Click camera button and motion buttons to record image only when motion detection is occurred

4-3) Sensor - Click camera button and sensor button to record image only when sensor is triggered

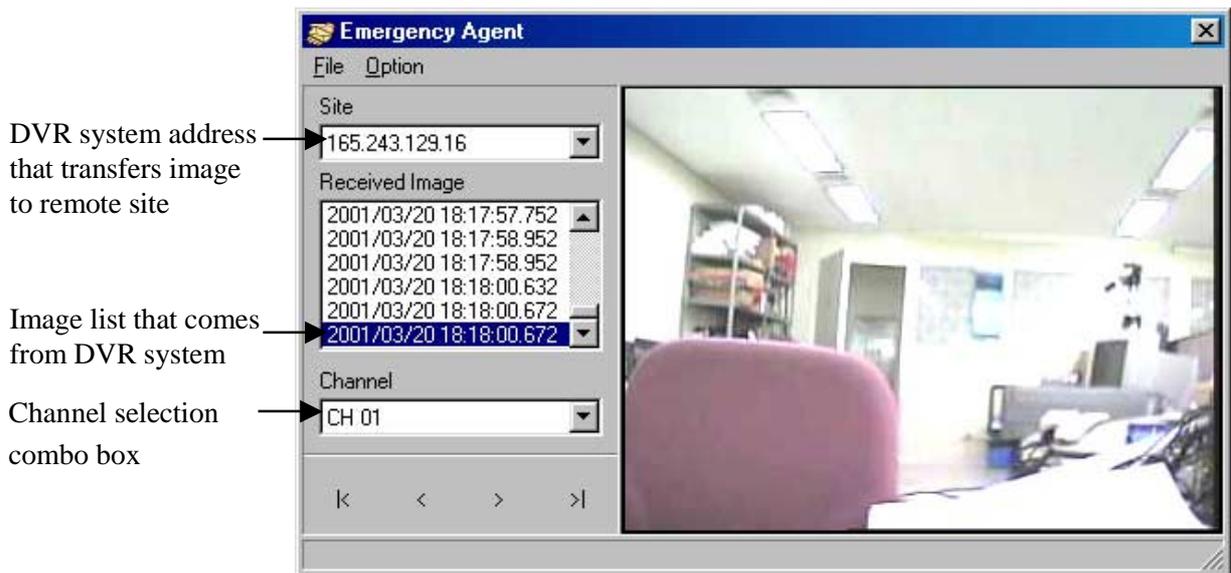
4-4) D/O - Click to enable the control output by motion or sensor event

! Camera is associated with Motion by one to one. Sensor is associated with D/O separately.

5) Remote Alarm – When a sensor or motion is triggered by something in the site, image of the camera corresponding to the sensor begins to be transmitted to the client, following window pops-up on top of the screen at client.



When remote alarm function is occurred, the following emergency agent screen will pop up on the screen of designated remote site



※ Use below command button to search transmitted image.

> - Forward play back button (by one frame) < - Reverse play back button (by 1 frame)

|< - Go to the beginning of the transmitted image >| - Go to the end of the transmitted image

! — Emergent transmission agent tray icon

6) Auto Reboot - Check to reboot the system once in a week.

➤ **To setup Scheduling recording**

Application Example 1)

Recording 4 cameras with using Motion Detection function

From Monday to Friday : AM 08:00 - PM6:00,

Saturday : AM08:00 - PM2:00,

Sunday : No recording

Reboot the system automatically

1. Select GROUP 01 and set START TIME at 8:00 and END TIME at 18:00.
2. Check MON, TUE, WED, THU, FRI in the DAY OF WEEK
3. Select 01, 02, 03, 04 in CAMERA and 01, 02, 03, 04 in MOTION
4. Select GROUP 02 and set START TIME at 8:00 and END TIME at 14:00.
5. Check SAT in the DAY OF WEEK
6. Select 01, 02, 03, 04 in CAMERA and 01, 02, 03, 04 in MOTION
8. Check Auto reboot
9. Set Auto reboot date and time

Application Example 2)

Continuous recording regardless of the days of week.

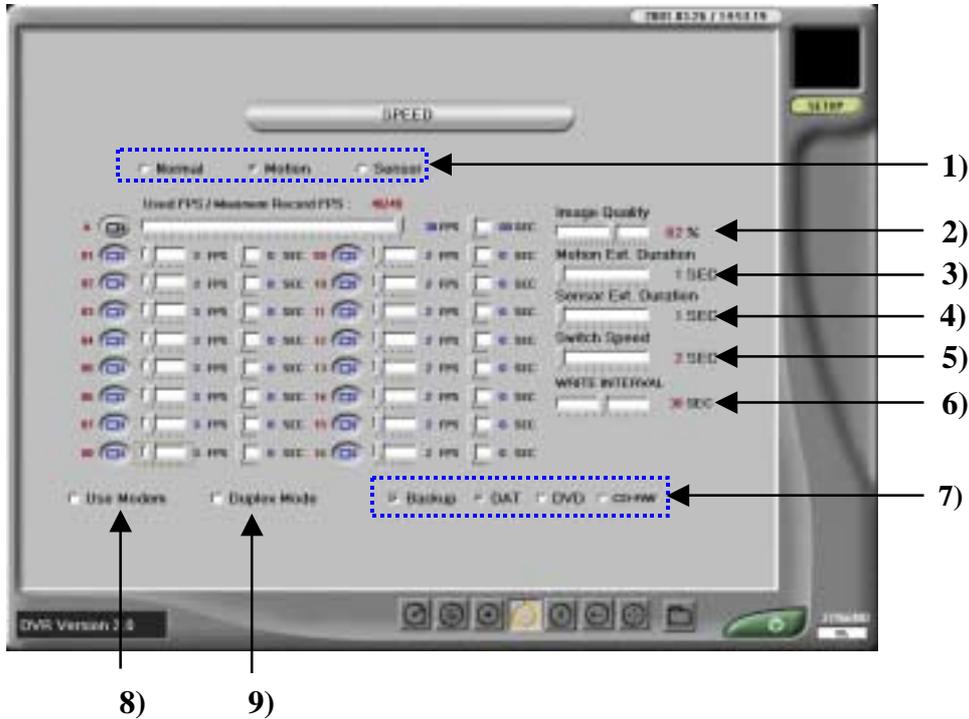
Upon a signal input from sensor 1, camera 1 starts recording and D/O 1 starts operating

Upon a signal input from sensor 2, camera 2 and 3 starts recording

Reboot the system.

1. Select GROUP 01 and set START TIME at 0:00 and END TIME at 0:00.
2. Check SUN, MON, TUE, WED, THU, FRI,SAT in the DAY OF WEEK
3. Select 01in CAMERA and 01 in SENSOR and 01 in D/O.
4. Select GROUP 02 and set START TIME at 0:00 and END TIME at 0:00.
5. Check SUN, MON, TUE, WED, THU, FRI,SAT in the DAY OF WEEK
6. Select 02,03 in CAMERA and 02 in SENSOR
7. Check Auto reboot
8. Set Auto reboot date and time

5.4 Speed Setup



☞ **NTSC** : You can control the recording speed up to 15 frames for each camera

☞ **PAL** : You can control the recording speed up to 12 frames for each camera

1) Recording mode – Set frame rate in the different mode

1-1) Normal - Check to set frame rate for continuous recording mode

1-2) Motion - Check to set frame rate for motion detection recording

1-3) Sensor - Check to set frame rate for sensor recording

2) Image Quality - Move the bar to adjust the recorded image quality (compression rate).

In higher setting, it lowers compression rate and keeps image quality high. So it requires high amount of storage space. In lower setting, it raises compression rate and keeps image quality low. So it requires low amount of storage space.

3) Motion Extension Duration - Move the bar to adjust recording extension time after the motion is detected (Max.180 sec.)

4) Sensor Extension Duration - Move the bar to adjust recording extension time after The sensor is triggered (Max. 180 sec.)

5) Switch Speed - Move the bar to adjust the switching time in auto switching function

6) Write Interval -

7) Backup Media Type – Check to backup media type(DVD or DAT) to back up. It's only available when the optional backup device is installed.

 In Backup mode, you are not able to use duplex mode

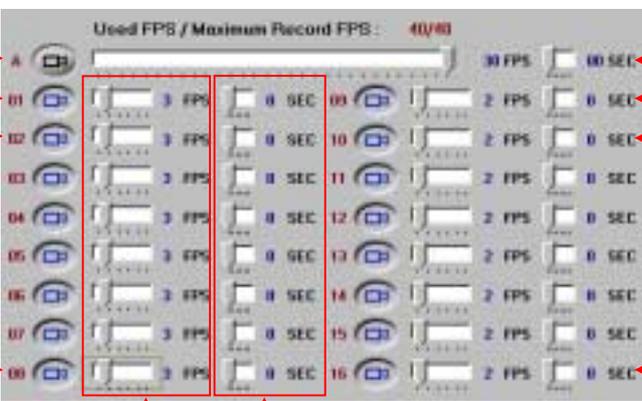
8) **Use Modem** - Check to use modem

9) **Duplex mode** - Check to use duplex mode. It records image while searching recorded image. In Duplex mode, you are not able to use backup mode

※ Pre-Alarm function

 If you select Motion or Sensor, pre-alarm control arrow will appear.

Max 5 seconds before motion is detected or sensor is triggered are recorded per each channel.



The screenshot shows a configuration screen for multiple camera channels. At the top, it displays 'Used FPS / Maximum Record FPS: 40/80'. Below this, there are 16 channels, each with a camera icon, a recording speed control (FPS), and a pre-alarm seconds control (SEC). A red box highlights the recording speed and pre-alarm second controls for channels 01 through 08. Arrows point from labels on the left and right to these controls. At the bottom, two red arrows point to the recording speed and pre-alarm second controls, with labels 'Recording speed Control' and 'Pre-alarm second Control' respectively.

Channel	Recording Speed (FPS)	Pre-alarm Second (SEC)
A : Average recording Speed	30 FPS	00 SEC
01: Cam 1 Recording Speed	3 FPS	0 SEC
02: Cam 2 Recording Speed	3 FPS	0 SEC
...
08: Cam 8 Recording Speed	3 FPS	0 SEC
09: Cam 9 Pre-Alarm Seconds	2 FPS	0 SEC
10: Cam 10 Pre-Alarm Seconds	2 FPS	0 SEC
...
16: Cam 16 Pre-Alarm Seconds	2 FPS	0 SEC

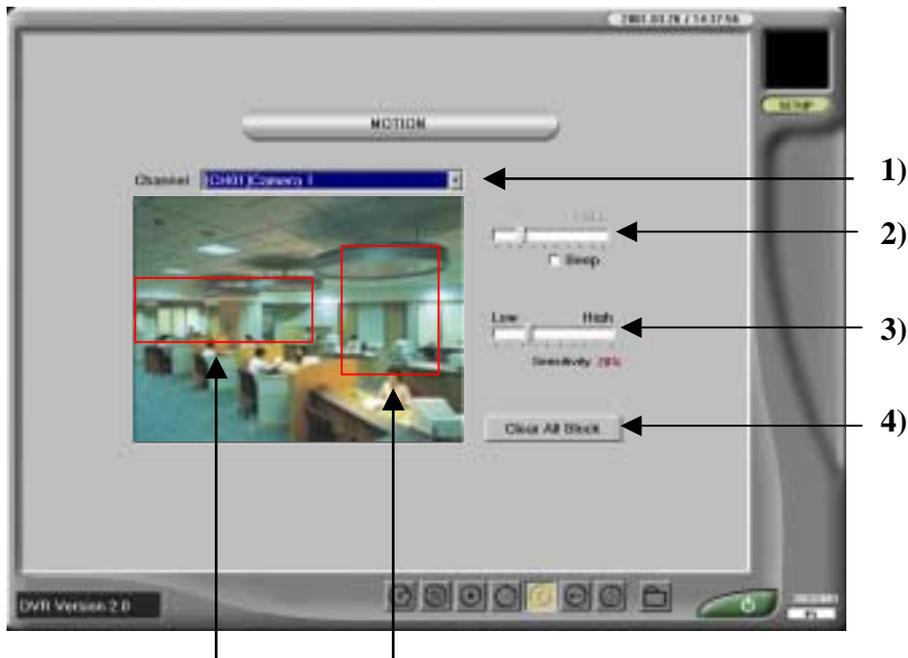
※ Notice (Recording Speed)

In Simplex mode, the total recording speed of all cameras is up to 160 FPS.

In Duplex mode, the total recording speed of all cameras is up to 60FPS

In Backup mode, the total recording speed of all cameras is up to 40 FPS .

5.5 Motion Detection Setup



Motion Detection Block Area

※ Motion detection function automatically detects the motion from entire screen and records images if you set up “Motion” in Schedule Setup.

1) Channel - Select the specific camera

2) Beep - Check to produce Beep sound on detection(up to 3 seconds). Then move the bar to adjust the beep extension time.

3) Sensitivity - Move the bar to adjust the sensitivity of Motion Detection

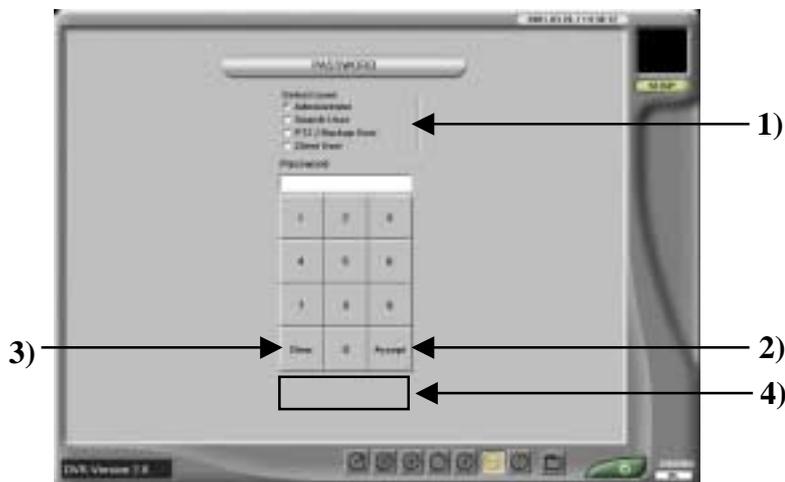
In higher setting, small changes of motion will be detected. In lower setting, large changes of motion will be detected.

4) Clear All Block - Click to clear all Motion Detection block area.



To select motion detection area, move the mouse pointer to the desired area and select the range by dragging the mouse. Motion Detection range area is available up to 10 areas in one camera.

5.6 Password Setup



1) **User level** – Select the following 4 different user level depending on the privilege of user

1-1) Administrator : Allow the user to access setup mode, search mode and PTZ/Backup function

1-2) Search user : Allow the user to access search mode only

1-3) PTZ/Backup user : Allow the user to control PTZ and access backup mode only

1-4) Client user : Allow user from remote site to access the Net DVR system

2) **Accept** - Click to apply the input password.

3) **Clear** - Click to erase the input password.

4) **Delete All Data** – Double-click to delete all data stored image

 **Use the mouse pointer to press the number button to enter the password. You can not input the password number with key board button**

➤ **To delete all data**

1. If you click the left button of a mouse twice at the bottom of password box, Delete all data icon will appear.



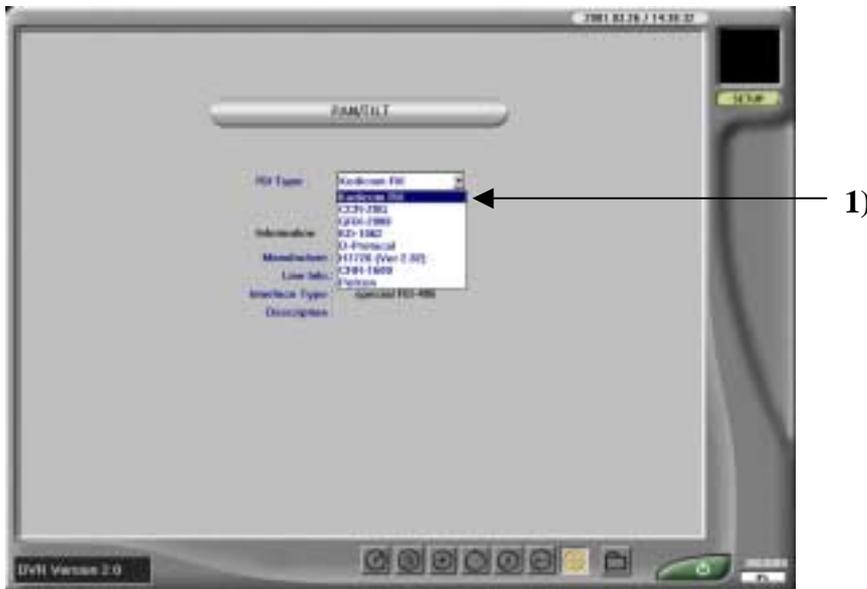
2. If you click the Delete all data icon, Confirm box will appear.



3. Click Yes button to delete all stored image data.

 **Make sure that you delete all data. It's impossible to recover once you delete it.**

5.7 PAN & TILT Setup



1) **RX type** - Select PAN/TILT receiver type and other detail information

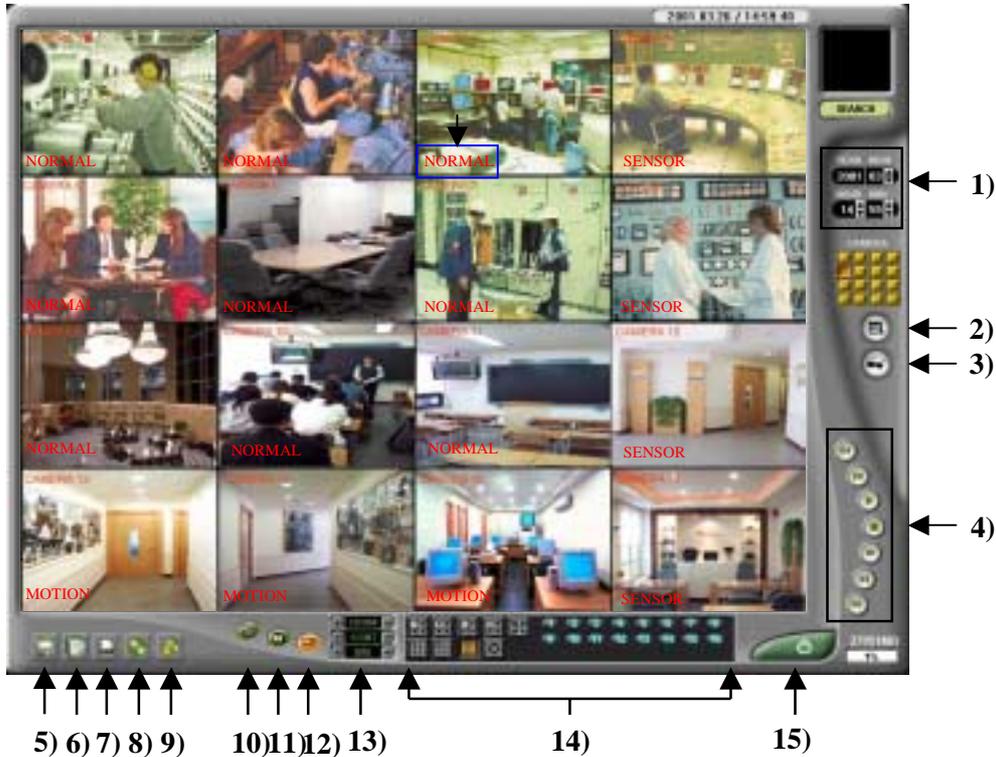
! Receiver type the DVR supports are as following

RX Type	Manufacture	Line Info.	Interface Type	Description	Remarks
Kodicom RX	KoDiCom	9600-8-N-1	Special RS-485		KOREA
CCR-20G	SungJin	4800-8-E-1	Interface Type	Current Loop	KOREA
GRX-2000	GerSung	9600-8-N-1	RS-485		
KD-1062	YINHE Electronics Inc.	9600-8-N-1	RS-422		
D-Protocol	Pelco Spectra	2400-8-N-1	RS-485(T)	RX Integrated Type	USA
H7720(Ver 2.02)	DynaColor	9600-8-N-1	RS-485	RX Integrated Type	JAPAN
CRR-1600	Fine System	2400-8-N-1	RS-232		
Pelcon	Pelcon	2400-8-N-1	RS-485		

6. Search Mode (HDD Search)



Press Search button to enter the search mode. You can search the recorded image by various criteria such as camera, date, sensor and event



- 1) **Time Search Window** – Click the arrow button to select the desired hour and minutes
- 2) **Index Search button** – Click to enter the index searching
- 3) **Show/Hide button** – Click to show or hide the Index list in the search screen
- 4) **Playback Search Control** – Press arrow button to control playback speed and direction
- 5), 6), 7) **FDD and AVI Save and print**– Click to save the image on FDD and AVI and print it
- 8) **Backup Search button** – Click to search the image stored on the backup media
- 9) **DAT, DVD, CD-RW(BACKUP) Media Eject button** – Click to eject the backup media
- 10) **Panorama Search button** – Click to search the image stored on the panorama
- 11) **Calendar button** – Click to select the desired date in calendar
- 12) **Camera button** – Click to select the desired screen division mode
- 13) **ZOOM/CON/BRI** – Press + and – to adjust Zoom/Contrast/Brightness of the image
- 14) **Camera division button** – Click to select the screen division
- 15) **Exit button** – Click to return the Display mode

6.1 Selecting Search date and time



Click this button to enter the screen division mode.



To search the image, you should select the desired camera. You can select screen division mode or each camera by clicking mouse. When you click the number of desired camera by using the left mouse button, the number will be changed to light blue.



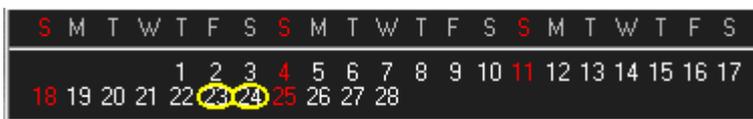
Click this button to magnify full screen and to hide the other functional buttons on the screen. To return the original screen division mode, click the right mouse button..



Click this button to undo the camera that you selected



Click this button to enter the calendar . Select the desired date to search in the calendar by using the left mouse button.



You can select the date when “O” is marked on the date

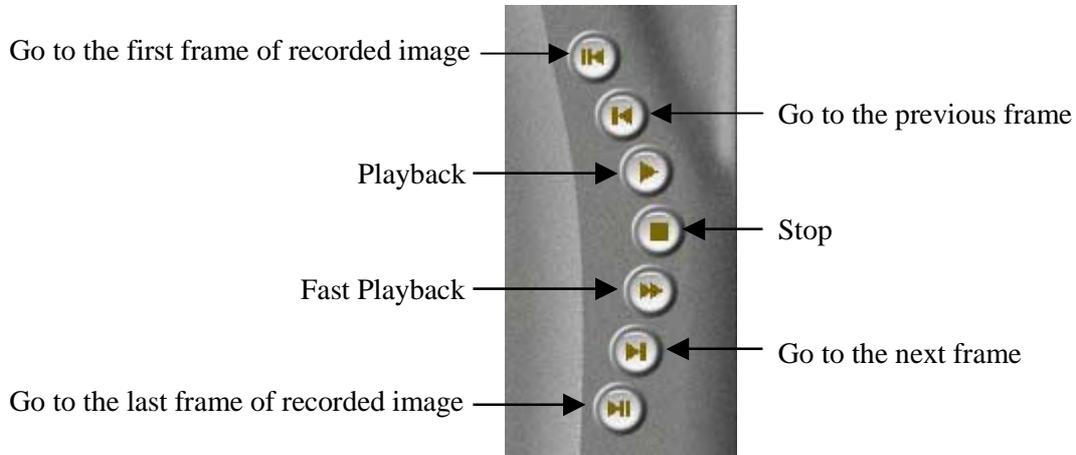


← Select the desired year/month by clicking up/down arrow button

← Select the desired hour/minute by clicking up/down arrow button

← Display playback current camera number

6.2 Playing back search image



6.3 Searching by Index

It can restore the image in Index when sensor or motion detects something. You can easily find out the sensor or motion detected data in this mode.



When you click this button, the following Index data list will appear. One more click the button to exit the index searching



Click to show or hide Index list in the search screen.

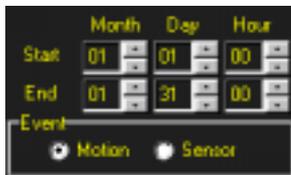
➤ To search by Index

1. Click Index search button. Then following Index data list will appear



! Above buttons can be applied only when Index(motion or sensor event) searching is used.

2. Press arrow button(up/down) to set start time and end time of data you want to search.
3. Select the event type which you want to search



- ! Only one camera is available to search, In Index searching mode.**
You cannot select or playback several cameras simultaneously in Index searching.

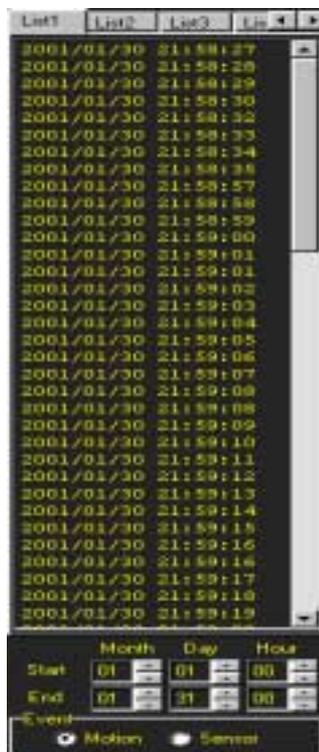
4. Select searching camera by clicking left mouse button



5. Index list will be displayed on the screen

- ! It will take several minutes to display Index list depending on data size(period).**

Stored data list



6. Select data in the Index list that you want to search. Click it to playback the stored image

- ! Up to 32,000 search results will be listed per one list box. If the data is more than 32,000 , it will go over to the next list box automatically (10 list boxes are available).**

6.4 Searching in Backup (DVD/DAT/CD-RW)



Backup search

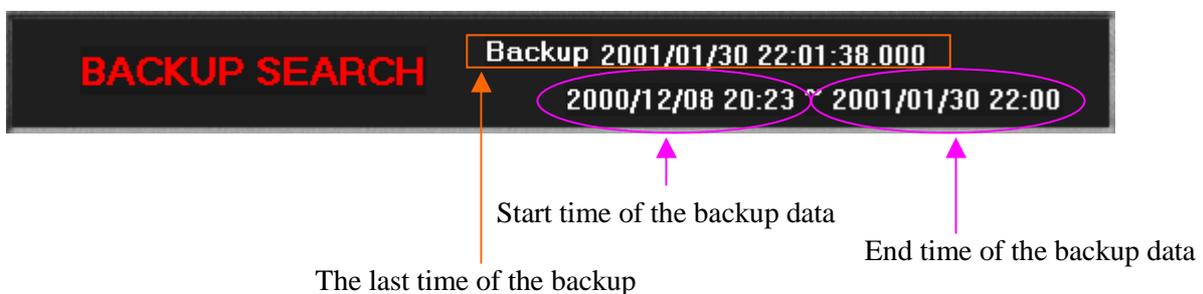
eject button media



Click this button to search the image which was restored on Backup media. Then click calendar button, following screen appears.



You have to wait for 2 ~ 3 minutes to search the image in backup media.



6.5 Controlling Zoom/Contrast/Brightness

You can magnify or reduce the size of searched image or adjust contrast/brightness of searched image



1) **ZOOM** - Press + and - button to adjust Zoom in/out the searched image

2) **CONT** - Press + and - button to adjust contrast of searched image

3) **BRI** - Press + and - button to adjust brightness of searched image



Zoom/contrast//Brightness, Floppy backup and Print function can be used when only one camera is selected in search mode. So when you back up to Floppy or print, you have to select only one camera. It means those functions will work only during one channel searching.

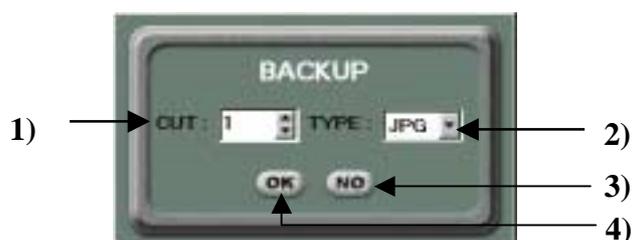
6.6 FDD Backup, AVI Backup and Print

※ Backup on 3.5 floppy diskette

You can backup the image on 3.5' floppy diskette.



If you click the button, following screen appears.



1) **Cut** - Select how many images will be saved from the present screen by clicking arrow(up/down) button

2) **Type** - Select File type (BMP or JPG type) by clicking arrow (down) button

3) **OK** - Click to confirm backup

4) **NO** - Click to cancel backup



Start to save it after inserting of 3.5' floppy disk

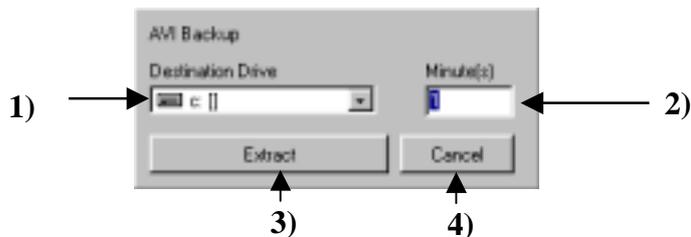
The total number of image for saving is limited to 30 frame at one time.

※ Backup on AVI

You can backup the image on AVI.



If you click the button, following screen appears.



- 1) **Destination Drive** – saving drive
- 2) **Minute(s)** – saving time
- 3) **Extract** – Click to confirm AVI Backup
- 4) **Cancel** – Click to cancel AVI Backup



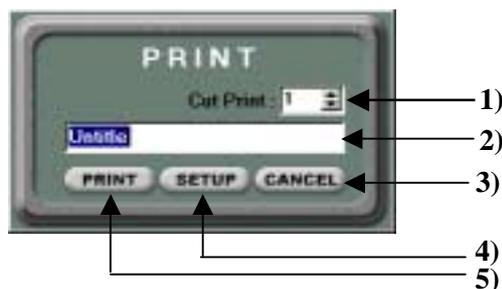
Start to save it after inserting of 3.5' floppy disk

The total number of image for saving is limited to 30 frame at one time.

※ Print in the paper



If you click Print button, following picture appears.



- 1) **Cut Print** - Select how many images will be saved from the present screen by clicking arrow (up/down) button
- 2) **Name** - Enter the name of printed image
- 3) **Cancel** – Click to cancel print the image
- 4) **Setup** – Click to setup printer type
- 5) **Print** – Click to print out the images



The total number of image for printing is limited to 30 frame at one time.

8. Communication Mode (Client Program)

Install the DVR Client software at client PC, following icon appears on desktop screen.

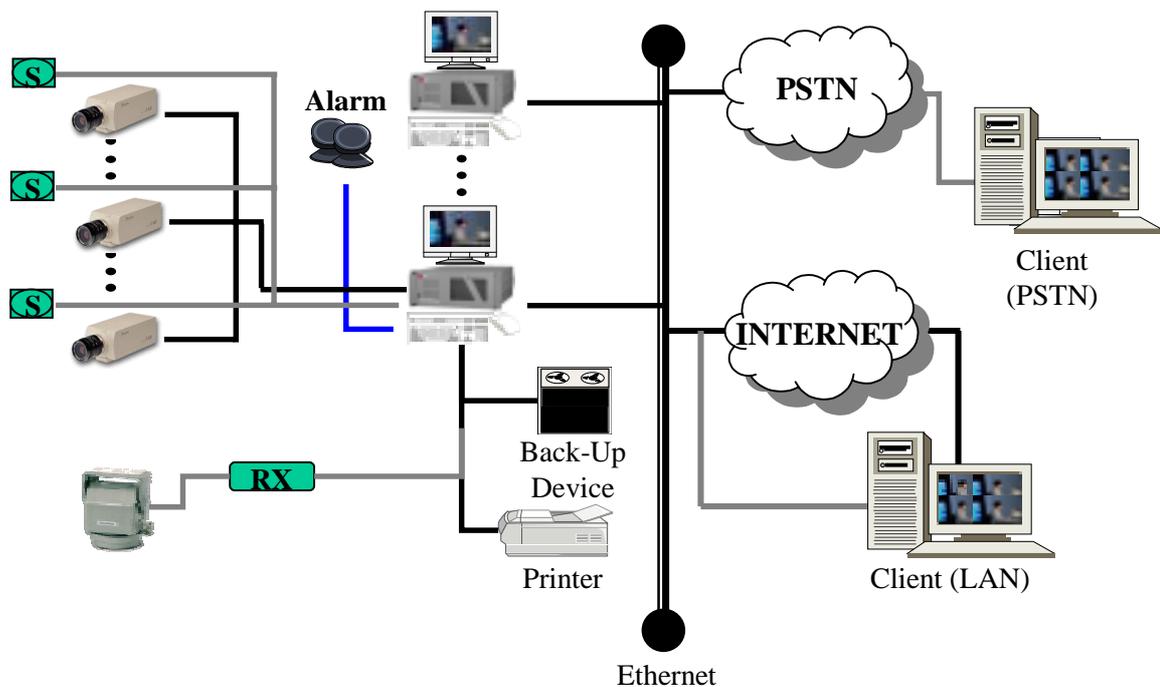


Double click the icon on the screen.

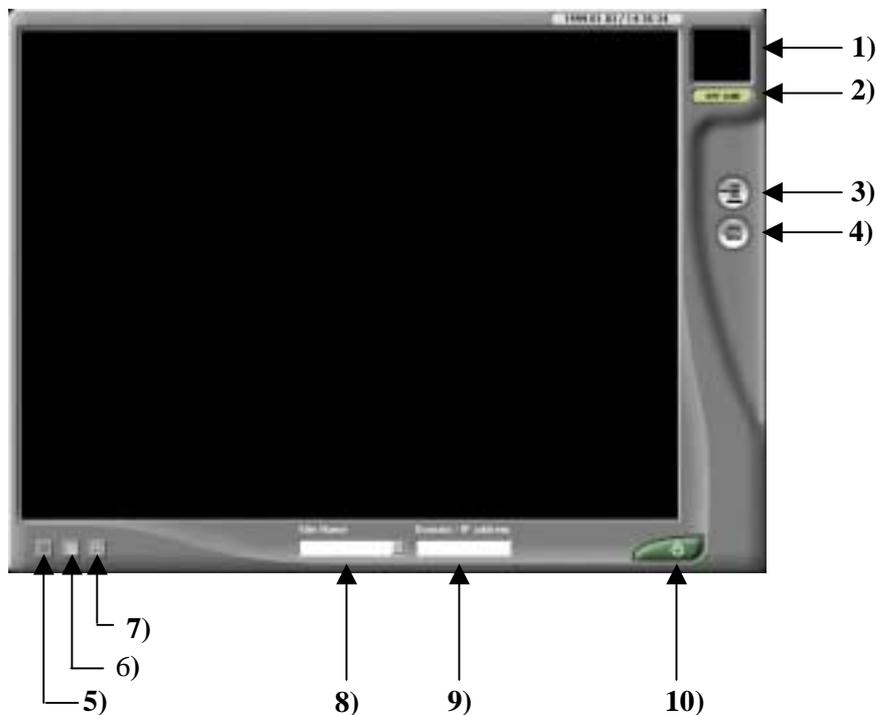
※ Client PC Requirements :

- **Resolution:** 1024X768
- **Color:** 32 bit (recommended)
24 bit(visible) : Image quality not good
less than 16 bit (invisible, only black screen)
- **Recommended VGA card**
ATI rage 128 (16 M RAM) Overlay supported
Savage 4 (16 M RAM) Overlay supported
- **Install DirectX 7.0**

※ System configuration



7.1 Main Screen



1) Current date, time indicator

2) On/Off line Indicator – It indicates the status of connection/disconnection to site(DVR system)

3) Setup button – Click to input site information such as site name, IP(phone Number) and password

4) Connection button - Click to connect to site

5) Single Auto switching screen – Click to use one channel auto switching function

6) Original screen – Click to display original screen (4, 8, 16 division will be displayed according to model)

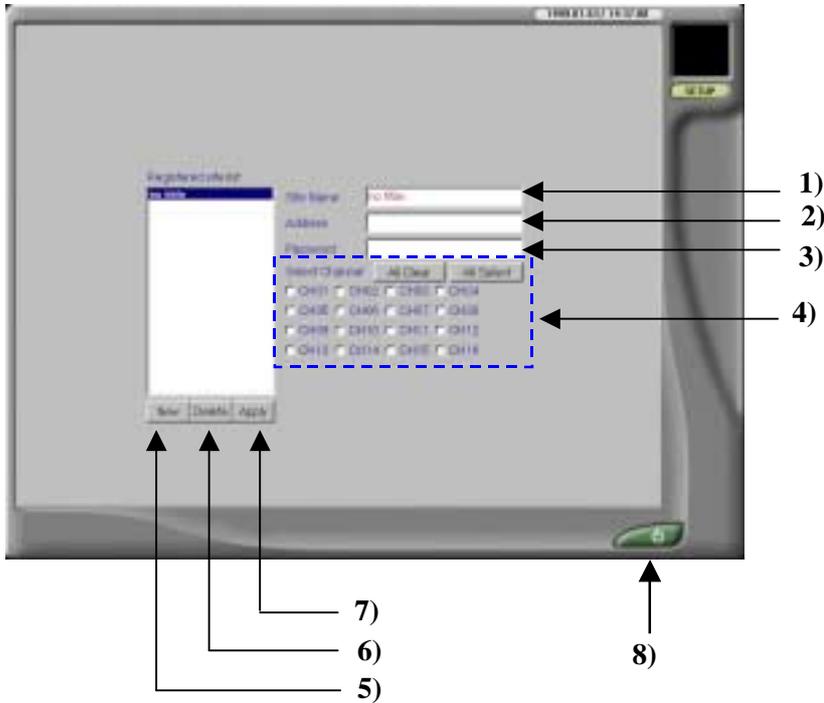
7) Full Screen – Click to magnify full screen and to hide the other functional buttons

8) Site Name – It shows the name of DVR system

9) IP Address/Phone Number – It shows the IP address or Phone number of site

10) Exit button – Click to return the windows mode

7.2 Setup Mode

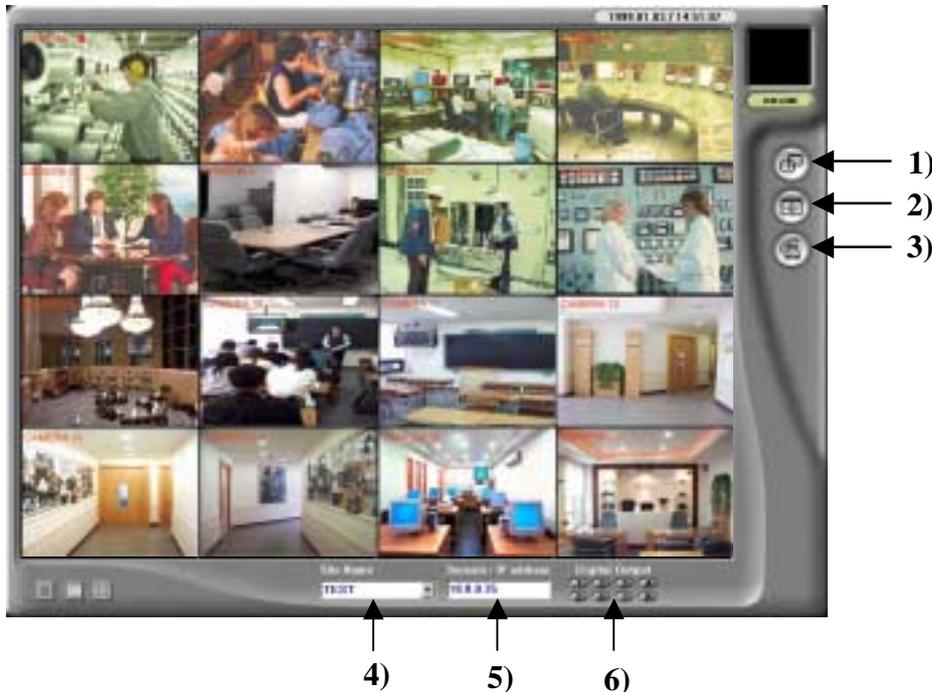


- 1) **Site Name** – Enter the name of site
- 2) **IP Address(LAN) or Telephone Number(PSTN)** – Enter IP address or Telephone Number of site
- 3) **Password** – Enter the password to access site (Client user password)
- 4) **Select Channel** – Check to the desired camera to be displayed. Only the selected camera will be displayed on the current main screen
 - 4-1) **All Clear** – Click to clear all selected camera
 - 4-3) **All Select** – Click to select all camera
- 5) **New button** – Click to start to input new site information
- 6) **Delete button** – Click to delete site information
- 7) **Apply button** – Click to apply new site information
- 8) **Exit button** - Click to go to main screen

➤ **To set up client communication**

1. Press New button
2. Enter site name, IP address and password
3. Press Apply button

7.3 Remote Site Watch from Client.



Select Site Name by clicking arrow (down) button at the bottom of the main screen, then select the connection button. When you succeed to connect the site, above screen appears. Select the desired screen format by clicking original screen, full screen and single auto switching screen button.

- 1) **Search button** - Click this button to search the recorded image data
- 2) **PAN/TILT Control button** - Click to this button to go to the PAN/TILT mode
- 3) **disconnection button** - Click to disconnect to site
- 4) **Site Name** – It shows the name of DVR system
- 5) **IP Address/Phone Number** – It shows the IP address or Phone number of site
- 11) **Digital Output** – Access button to control output relay (alarm)

7.4 Remote Site Search from Client



In display mode, click search button to go to search mode. Search procedure is same as at the site
Press Exit button to return the display mode.

7.5 PAN/TILT Control from Remote Center

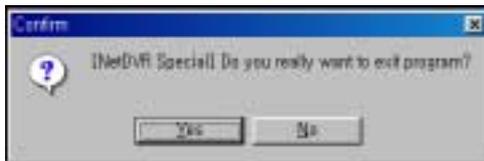


In display mode, click PAN/TILT control button to go to PAN/TILT mode. Control procedure is same as at the site. Press Exit button to return the display mode.

7.6 Exit Program



Press EIXT button to terminate program. Then following confirmation box appears.



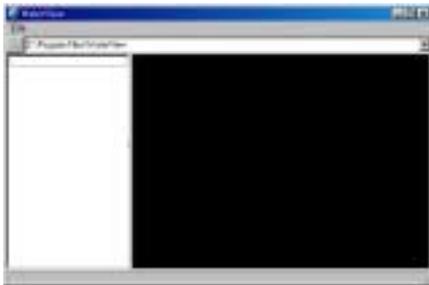
Press Yes button to Exit program

8. Watermarking Function (Option)

This Watermark tool allows you to verify whether the original image was changed or not. To use Watermarking software program, you should install the WaterViewer.exe file in the PC you want to use.

➤ To use Watermark function

1. Run WatermarkViewer.exe file, then following box appears



2. Go to the File menu, then press Select folder button in the file menu

3. Select the desired image saved as JPG, BMP format in this directory



If the original image has not been changed, The Image has not been altered message appears. If the original image has been changed, Image has been altered and has not been watermarked message appears as below.



Original Image(JPG)



Changed Image(JPG)



In JPG format, no indication can be shown for the changed area as JPG format uses whole compression method when saving. If you rename the original file name in the different file name, the renamed file cannot be verified by watermark function.



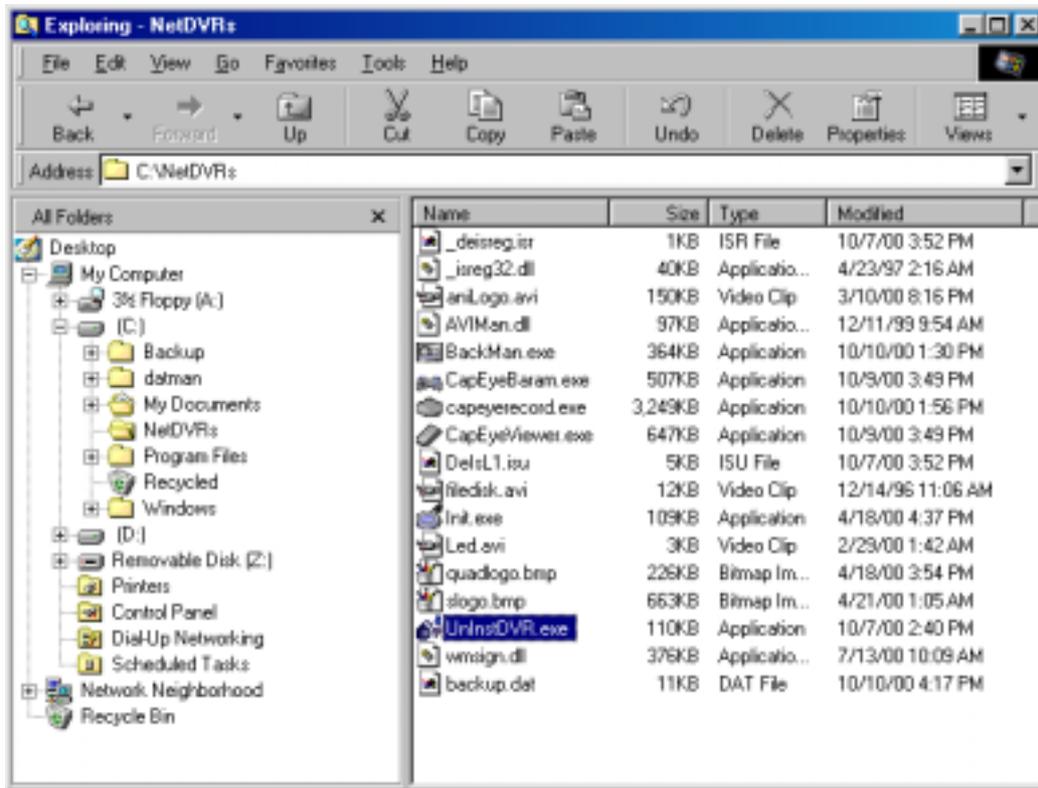
Original Image(BMP)



Changed Image(BMP)

In BMP format, it indicates the changed area on the image.

9. Uninstall and reinstall procedure



“UnInstDVR.exe” is for uninstalling the program.

(UnInstDVR.exe is in C:/NetDVRs directory)

Caution) Before uninstalling, be careful to remove DVR program or not. When you uninstall, all DVR program files, system files and Capture card drivers will be lost completely.

To reinstall the program, please insert CD-ROM and then Setup.

(CD-ROM is supplied with DVR-Deluxe to customer)



- 1) Choose one of two for proper signal system in your area.
- 2) Install program for server (1) and (7).
- 3) Reboot the computer.

To access DVR through Internet, the remote computer is required to install the Client program (5)

- 1 (Setup the program for Server)
- 2 (Setup the Back-Up Viewer)
- 3 (Setup the Watermark View)
- 4 (EXIT)
- 5 (Setup the program for Client)
- 6 (Emergency Agent)
- 7 (Setup the directx)

If there is no CD-ROM driver, install the Net DVR's program in C:/ Backup.

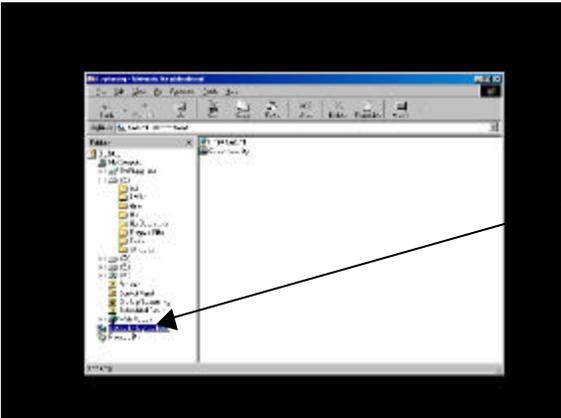
Network Setup



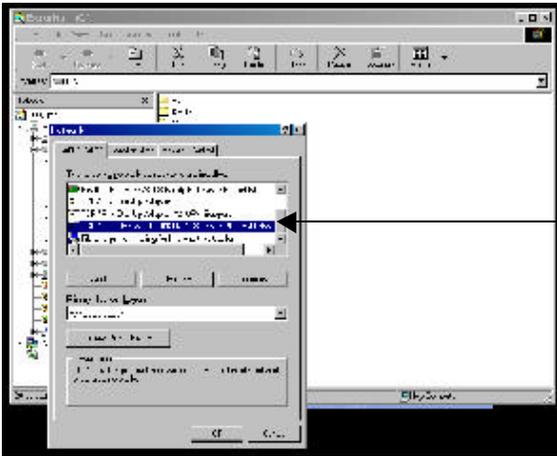
Click **Setup**



Click **Quit to Explorer**

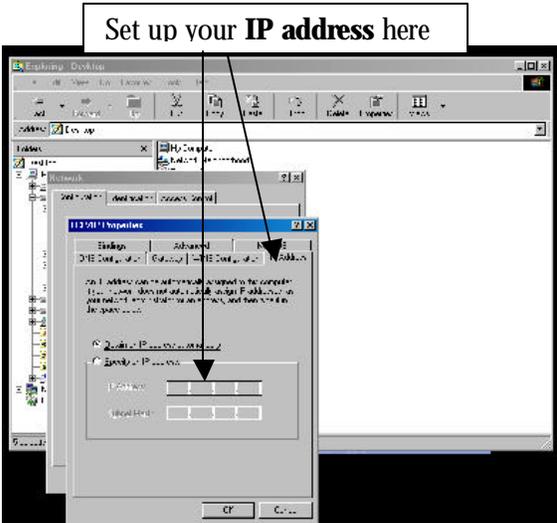


Right Click on **Network Neighborhood** and click on **Properties**

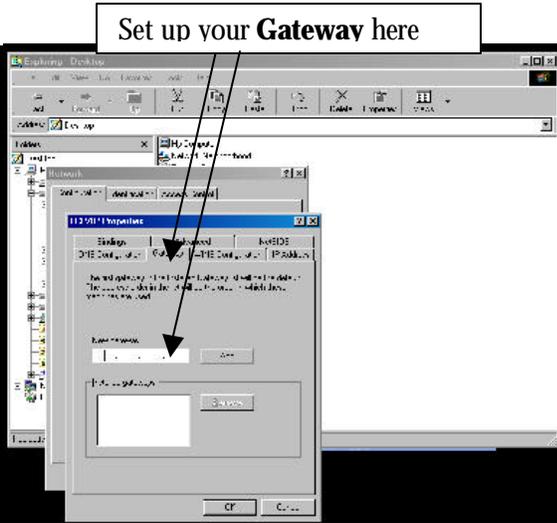


Find where **TCP/IP** points to your network adapter and **double click** to open

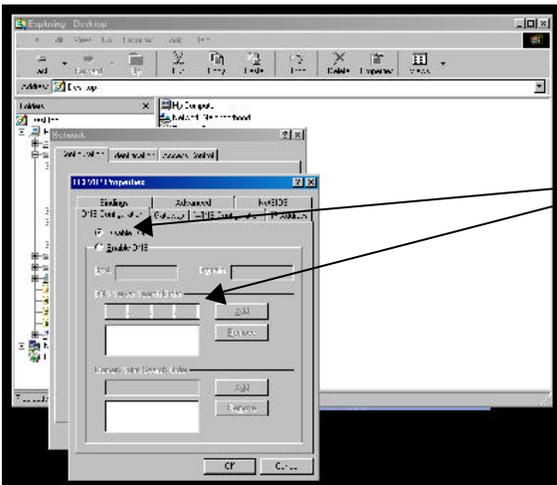
***NOTE* Consult your Network Administrator or ISP for the following Information**



Set up your **IP address** here



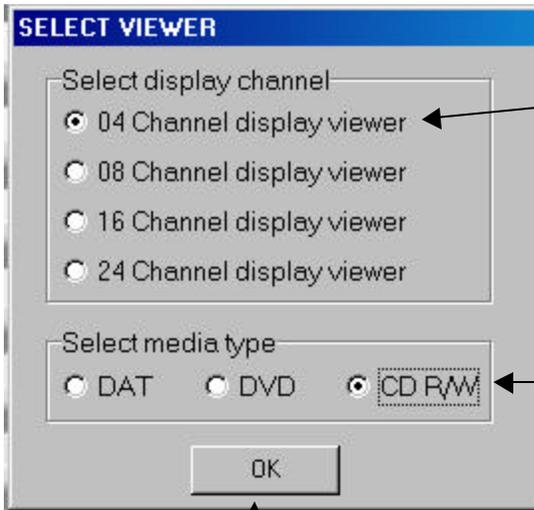
Set up your **Gateway** here



Set up **DNS Info** here

DVR Backup Viewer Summary

After installing the Backup Viewer, find the program by clicking your start menu. Look for programs, then "DVR Backup Viewer" and click on the icon. This will bring up the screen located below. Please make sure you have your CD loaded in the CDR drive at this time.



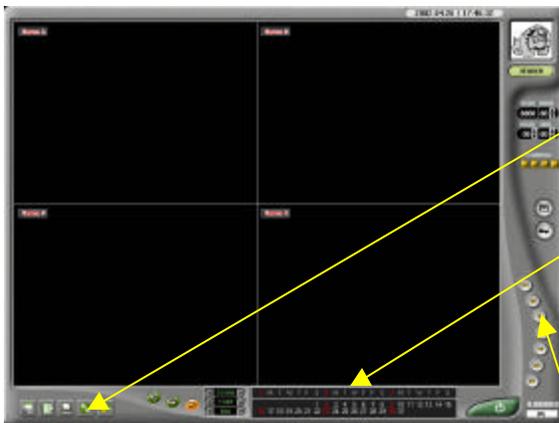
Click the amount of **channels** you would like displayed

Click on **CD R/W** to view backup CDs

Click OK



Click **OK** when this box appears



You will see this screen. Press the **Primary / Secondary button** that looks like a CD

You will see this box...

Change to this box...

BACKUP SEARCH Backup 2002/03/27 16:21:40.0
2002/03/25 18:38 ~ 2002/03/27 16:21

Press **Play** to view your backup

System Specification for DVR Backup Viewer

Checklist for client machine:

- ✓ Operating System Windows 98 SE
- ✓ Video Card 16 MB of Video Ram or Greater
- ✓ Monitor Resolution 1024 x 768 or Greater
- ✓ DirectX 7.0 or above
- ✓ CD-Rom Drive Newer model CD-Rom
- ✓ Software DirectCD 3.0 or Greater
Windows Media Player 8.1a or Greater

Volume

1

DIGITAL WATCHDOG

CDRW DISC BACKUP AND SOFTWARE OPERATION

CDRW ADDENDUM

USING CD-R DISKS FOR BACKUP

CDRW GUIDE

DIGITAL WATCHDOG
KALTECH ENTERPRISES
5436 WEST CRENSHAW ST
TAMPA FL 33634
1-813-888-9555

This Document will explain the correct operation of the CDRW for saving AVI files or backing up video files

Checking the DVR for CDR Archiving

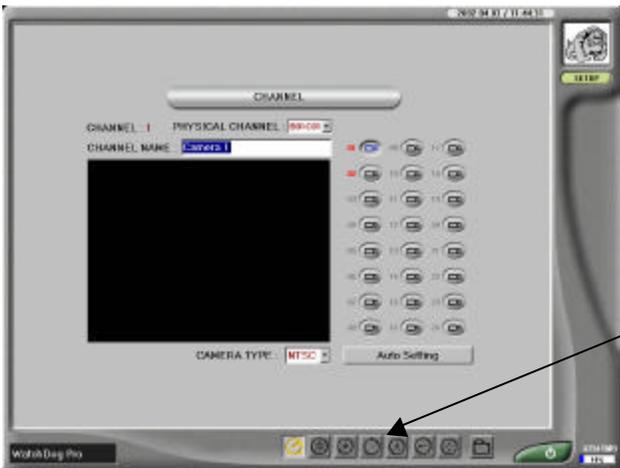


Look on the DVR Main Screen there should be four buttons on the right hand side

1. **Search**
2. **Setup**
3. **PTZ Control**
4. **Backup**

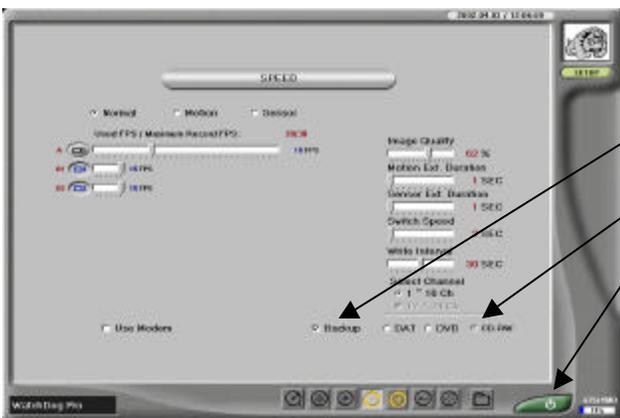
If there are only 3 follow these instructions

1. Press **Setup button**. This will bring you to the Main Setup Screen
2. Press the button marked **Speed**



Setup Main Screen

Speed



Put a check mark next to **Backup** using your mouse

Then click the **white circle** next to CD-RW

When finished click the **green exit** button one time

You will then return to the main screen and you are ready to go.

MAIN SCREEN



Getting Started

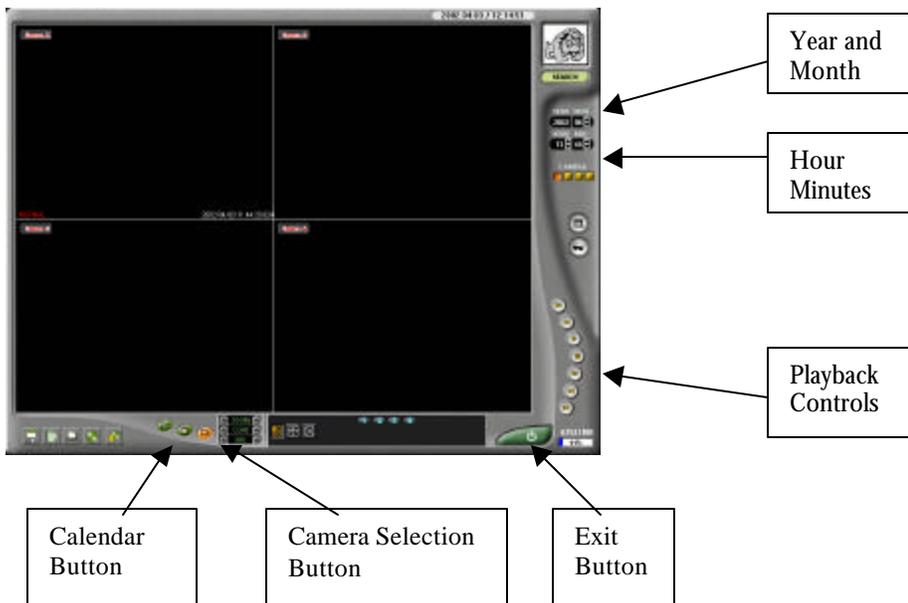
1. Have **Blank CD-R Disks** on hand (Do not use CDRW Discs as they are not as useful as CD-R)
2. **Black Magic Markers** to label discs with Day, Date, Time, and Event Description
3. Information on **when and what camera** the event happened on
4. Read main manual on playback instructions

Operation

1. Press Search button
2. Wait For Search Screen



Search Screen



1. Place New **Blank CDR** in CD drive tray
2. Wait a Few moments. The **CD Format Screen** should appear
3. Press Alt + Tab to get the program to come up if its in the background

CD Format Screen



When this appears Press **Format Button**



Type **Label** Name for Disc

Then Click **Start Format** Button

This Operation should take 1 to 2 minutes



You should see this screen

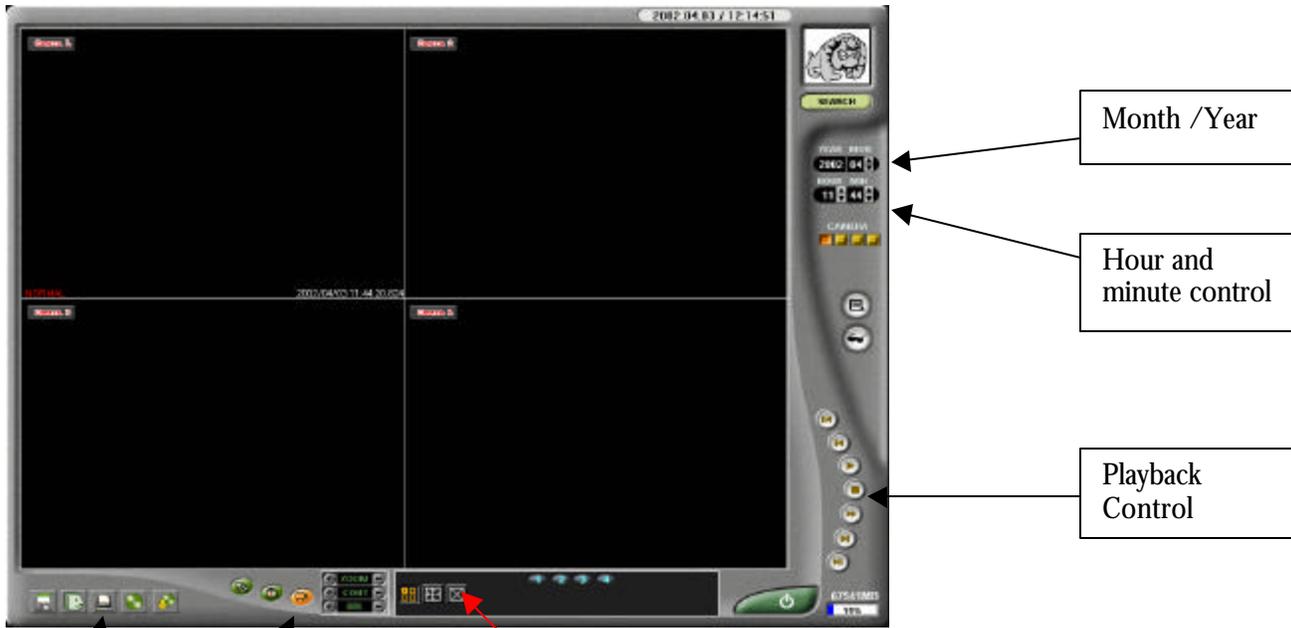
NOTE

Should you lose track of the Direct CD or Format Window there is a way you can bring it back. Press and hold down the ALT Key and Press the TAB key one time.

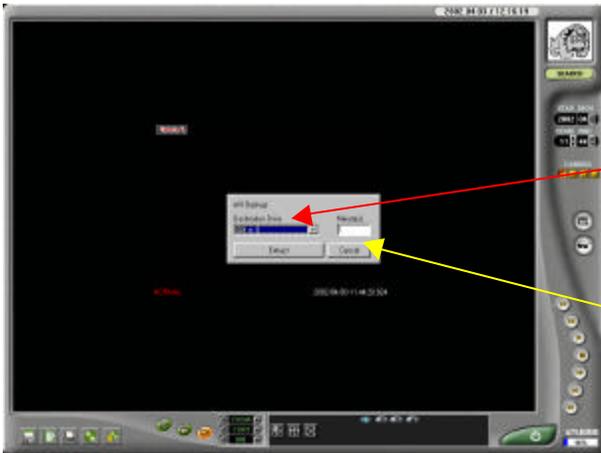
NOTE

Should you lose track of the Direct CD or Format Window there is a way you can bring it back. Press and hold down the ALT Key and Press the TAB key one time.

Saving Video to your Formatted CD

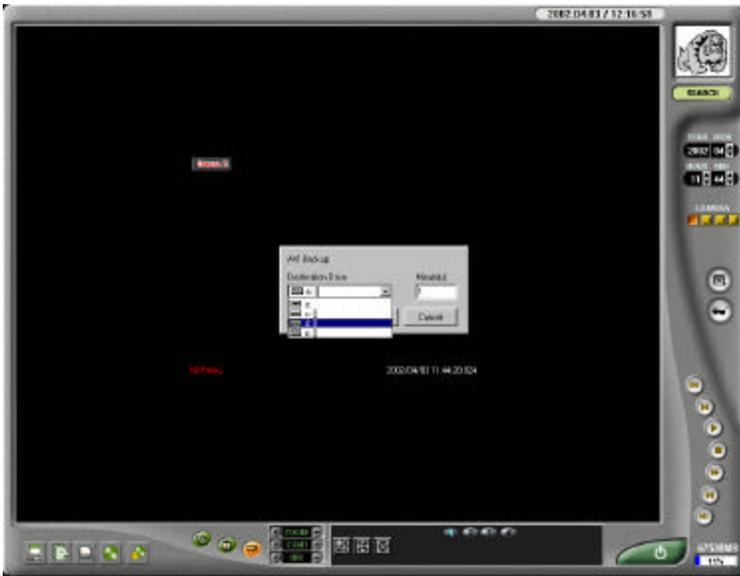


1. Press the **X Box** to deselect all cameras and then choose the camera the event took place on
2. Using **date, time, and playback controls**, find the event on the DVR you want to save
3. Click the **AVI Save** button and a window will appear in the middle of your screen
4. Choose **Drive Letter** from pull down menu (CD is usually the last drive letter)
5. Put approximate duration of event in **minute box**



Drive Letter Pull Down Menu

Minute Box



1. Press **Extract** (this process will take however many minutes were put in the **minute box**)
2. After the process is done the box will disappear
3. To **remove CD disc** press **eject** button on CDR DRIVE
4. The drive will then begin to make the disc ready to be read in any CDROM drive (some older or inexpensive ones will not be able to read disc)
5. This process will take anywhere from 1 to 30 minutes to complete depending on how much data was put on the drive

NOTE

(CDRs, can hold up to 45 minutes of video but this will vary if the cameras are black and white or color and what the frame rate is)

NOTE

After CD is ejected the file on the disc should be able to play in any windows based computers (and most MACS) if the system is equipped with a CDROM drive, made in the last 18 months, DirectX 7, and the latest version of windows media player. The OS should be WIN98, 2000, or NT with service pack 6a. The latest version of XP should work also.

Warranty

Kaltec Electronics (referred to as “the Warrantor”) warrants the Digital Video Recorder against defects in materials or workmanship as follows:

Model 6016, 6616

LABOR: For a period of (1) year from the date of original purchase, if Digital Video Recorder is determined to be defective, Kaltec will repair or replace the unit, with new or refurbished product at its option, at no charge.

PARTS: In addition, Kaltec Electronics will supply replacement parts for a period of (3) years.

Model 5008, 5016

LABOR: For a period of 1 year from the date of original purchase, if Digital Video Recorder is determined to be defective, Kaltec will repair or replace the unit, with new or refurbished product at its option, at no charge.

PARTS: In addition, Kaltec Electronics will supply replacement parts for a period of one (1) year.

To obtain warranty or out of warranty service, please contact a Technical Support Representative at 1-866-446-3595 Monday through Friday from 9:00 AM to 5:00 PM Eastern.

This warranty is extended only to the original purchaser. A purchase receipt or other proof of the date of the original purchase is required before warranty service is rendered. This warranty only covers failures due to defects in materials and workmanship which arise during normal use. This warranty does not cover damage which occurs in shipment or failures which are caused by products not supplied by the Warrantor or failures which result from accident, misuse, abuse, neglect, mishandling, misapplication, alteration, modification, faulty installation, set-up adjustments, improper antenna, inadequate signal pickup, maladjustment of consumer controls, improper operation, power line surge, improper voltage supply, lightning damage, rental use of the product or service by anyone other than a Digital Video Recorder authorized repair facility or damage that is attributable to acts of God.

LIMITS AND EXCLUSIONS

There are no express warranties except as listed above. THE WARRANTOR SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGE TO RECORDING MEDIA) RESULTING FROM THE USE OF THIS PRODUCTS, OR ARISING OUT OF ANY BREACH OF THE WARRANTY. ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE LIMITED TO THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you. This warranty gives you specific legal rights and you may also have other rights that vary from state to state.

If the problem is not handled to your satisfaction, then write to the Address above.

SERVICE CALLS WHICH DO NOT INVOLVE DEFECTIVE MATERIALS OR WORKMANSHIP AS DETERMINED BY THE WARRANTOR, IN ITS SOLE DISCRETION, ARE NOT COVERED. COSTS OF SUCH SERVICE CALLS ARE THE RESPONSIBILITY OF THE PURCHASER.



Digital Watchdog By KALTEC Electronics inc
5436 West Crenshaw St.
Tampa FL 33634

Tech Support Phone Number
1-866-446-3595 ext 242

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