# DVR SYSTEM User's Manual

Manual Revision : Version 3.0
Release Date : Aug. 30, 2003



# **INFORMATION TO THE USER (Part 15.105(b))**

#### INFORMATION TO THE USER

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one more of the following measures:

- -Reorient or relocate the receiving antenna.
- -Increase the separation between the equipment and receiver.
- -Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -Consult the dealer or an experienced radio/TV technician for help.

# **WARNING (Part 15.21)**

The manufacturer is not responsible for any Radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment."

# **INDEX**

# DVR User's Manual

#### 1. DVR Sever

# 1-1. Display Mode

Main screen

Pan/Tilt Control

# 1-2. Setup Mode

Standard Setup

Recoding Setup

Schedule setup

Motion Detection Setup

Color Setup

PAN/TILT Setup

Network Setup

Backup Setup

#### 1-3. Search Mode

Search screen

Data Back up

Search Data & Time

Print

# 2. Client program

# 1. DVR SERVER

1-1. Display mode

# **DISPLAY Mode**



- A . Camera Number/recording state
  - ( 1 : Camera No. / 2: Recording / 1 : Motion / 1 : Sensor)
- B. Display present images
- C. Select screen division among 1/4/6/7/8/9/10/13/16Ch.
- **D. Auto switching** (Rotation): Displays switching images by 1Ch./4Ch./8Ch. in sequence with selected time interval.
- E. Select camera No.
- F . Go to 'SETUP' Mode.
- G . Go to 'SEARCH' Mode.
- H. Power

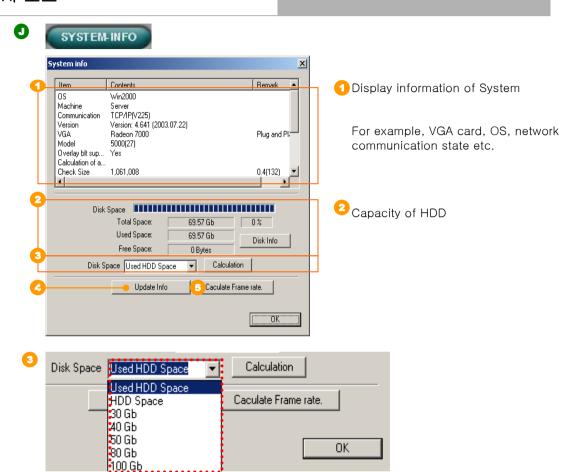
When you click the Power button, DVR system will be shut down.

When you want to go Window mode, Please go to Setup.

(But, Do not use this function except only unavoidable situation for the system.)

I. TIME: Display current time.

# 감시 모드



Calculate used HDD space of current setting.

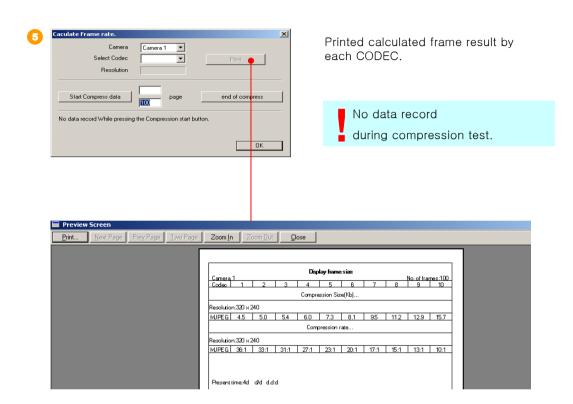
Used HDD space is very changeable by setup of channel, recording method, compressor, image size etc.

So, you can calculate used HDD space by this function.

Also, If you specified HDD space, you can calculate used HDD space.

UPDATE information – Information of adding function & bug fix, etc.







When you click the Power button, DVR system will be shut down.

When you want to go Window mode, Please go to Setup.





Display present recording images.

This function is only our product's special feature.
 You can know present compressed recording image by CODEC.

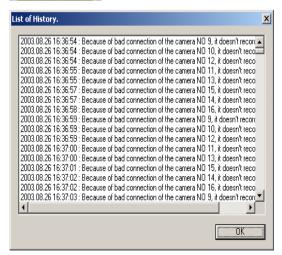




Real time chatting between SERVER and CLIENT.

If you connect with several user, you can choose just one user and then send message to one user.

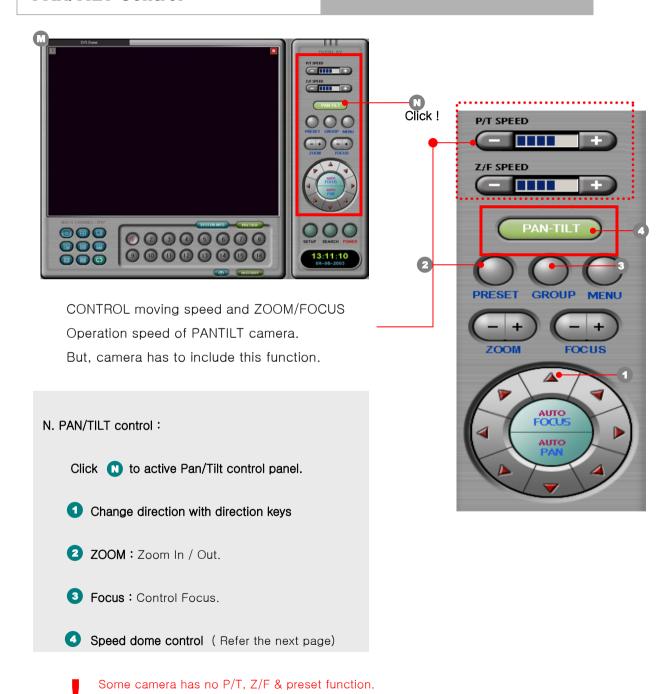




Record history of DVR SERVER.

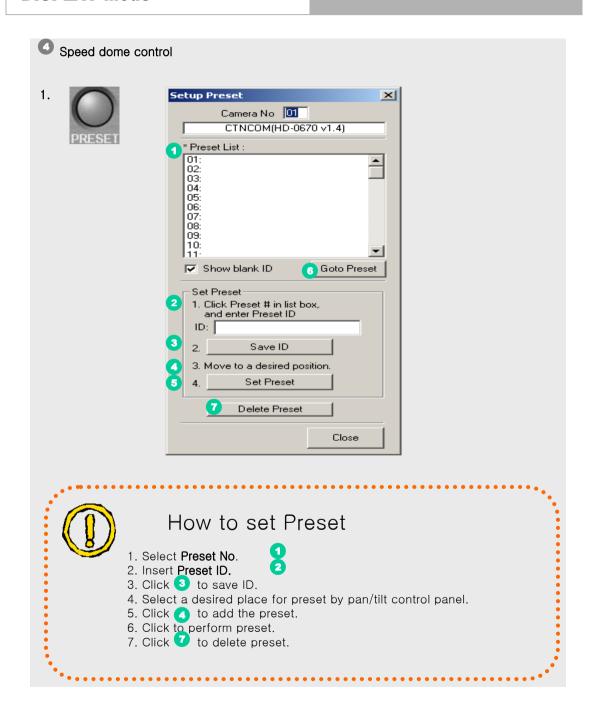
You can know working history and Connect history from outside

# **PAN/TILT Control**

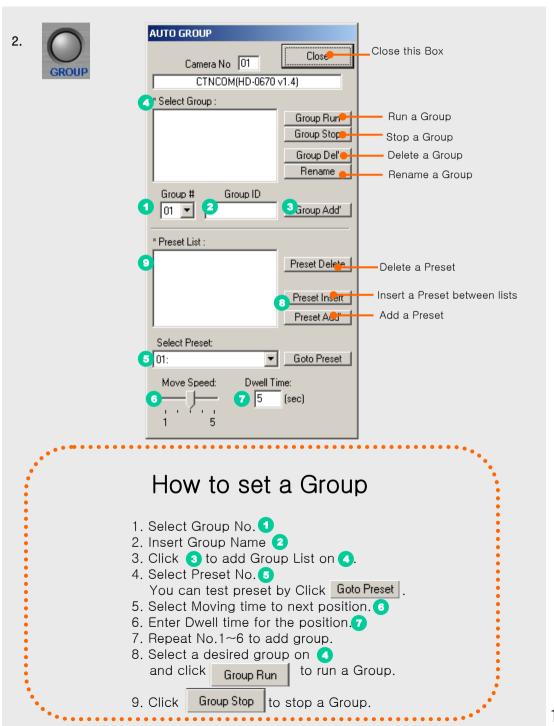


Please use, after check CAMERA MAKER about this function supporting.

# **DISPLAY Mode**



# **DISPLAY Mode**



# SVS Dome

In case that more than one PTZ camera set up, when user clicks or operates keys of PANTILT, some camera which are operated will be displayed on screen.

If click this part, window for PANTILT setting will be open.

This function is convenient for users to operate several PANTILT in one DVR system.

# 1. DVR SERVER

1-2. Setup mode

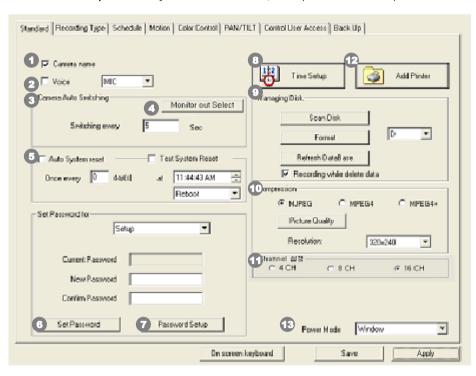
#### STANDARD SETUP

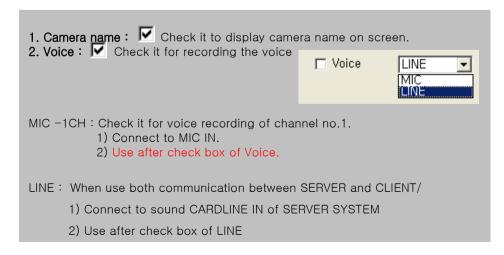




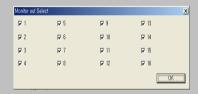
go to "SETUP" mode

1. STANDARD setup: after system installation, setup as user's requires.





- 3. Camera auto switching: Select camera switching time (Default: 1sec)
- **4. Monitor out select:** You can choose image of analog monitor among display images (Only for DF900,1000,1500 ,2400 )



5. Auto system reset: Setup a time interval for rebooting and shutdown the system.





#### What is the watch Dog?

When system is unstable while monitoring, it automatically reboot the system.

# STANDARD SETUP

#### 6. Set password:

Enter new passwords for Setup/Search/View/Power Down mode.

-Setup : Program "Setup"

-Search: Program "Search"

-Viewer: Start DVR

-Power Down : Close DVR

Set Password



#### First setup

- 1. Select password among Setup, Search, Viewer, Power Down.
- 2.Insert password
- 3.Confirm password
- 4. Click "Set Password" and then, check message.

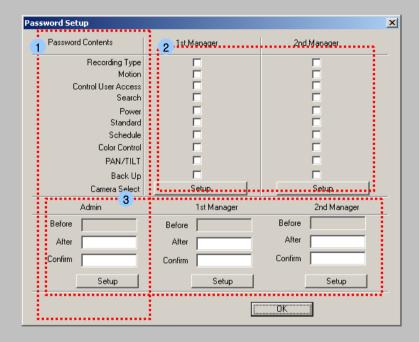
#### Delete

- 1. Insert current password
- 2. Do not insert "New Password" and "Confirm Password"
- 3. Click "Set Password"
- 4, Select delete message of pop up window.

# 7. Password setup

Password Setup

Control USER right for DVR using.

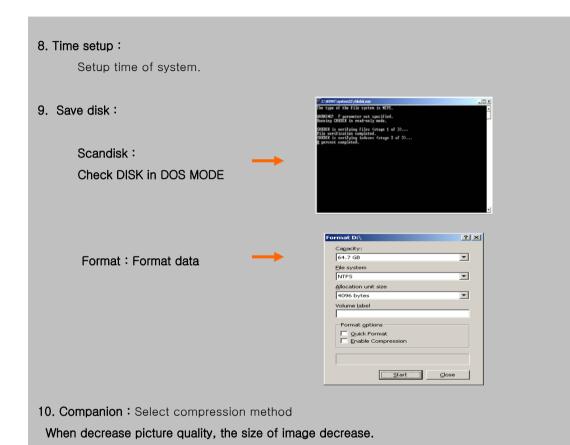


- 1 If you permit right of secondary and third administrator that you have to setup primary administrator password.
- 2 Select desired contents for each manager.
- 3 After check, setup password.

Admin: all functions available

Set 1st Manger and 2nd Manger up for your desired function.

16



- Companion

  Picture Quality

  Picture Quality

  Average image fi

  Resolution:

  Quality

  8
- · Resolution: Information of current picture quality

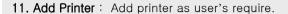
You can see more frames in Remote Access.

11. Setup Channel: If user wants to extend more than 4ch that user selects desired channel

(Only for model DF-1000, 1500, 2000)

#### STANDARD SETUP

#### 1-3. STANDARD Setup





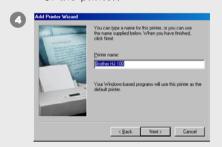
Click! Next



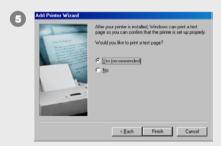
Select Printer Port and click Next.



Select a manufacturer and model of the printer.



Finter Printer name and click Next.



After printing test, click Finish.

12. Power Mode: Select desired power mode when you shut off

DVR System by clicking Power button in Main mode.

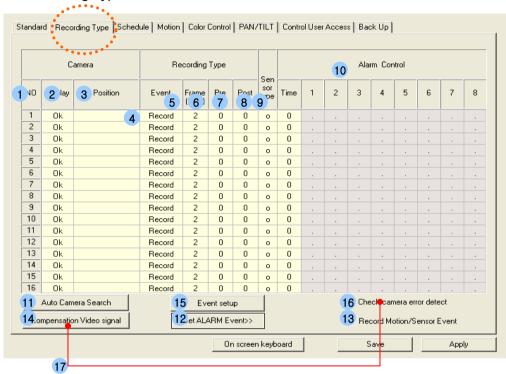
Window: Go to Window Mode when you click Power button.

Power off: DVR system power off when you click Power button.

(Notice: DVR system is security product. So If user working in window mode, you have a possibility get problem in your system.)

# 저장방식 설정





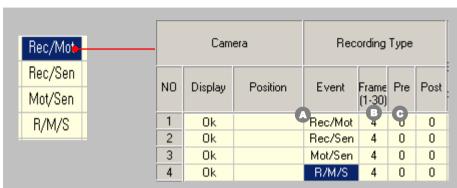
#### 1. Camera Number

#### 2. Connect: Hidden camera function.

'None' selected camera does not show images on the screen while recording so that people can not notice it is recording.

- 3. Camera name: Click the left button of mouse where you want and enter the camera name as you want.
- **4. Event :** You can set different recording type (sensor, motion, schedule, record, no record) by Mouse click.

When block selected, it can be changed by Right Mouse click.



Rec/mot: Normally DVR recorded by setup frame.

But, when motion happens DVR will be record by setup Pre/Post frame.

This is complex function for recording & motion the selected channel.

So, this is very useful function for saving hardware.

Setup Rec/Mot for event.

Select recording frame while recording.

© Select recording frame of Pre/Post during motion

REC/MOT: When motion events, recording frame will be increased

REC/SEN: When sensor works during recording, recording frame will be increased.

MOT/SEN: This is recording function for Motion/Sensor at the same time.

R/M/S : This is recording function for Recording/Motion/Sensor at the same time.



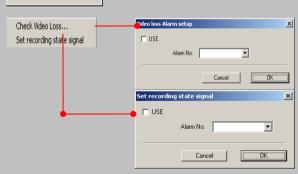
If user wants to setup same setting for several camera as follows;

- 1. Drag select area by mouse left button.
- 2. After click mouse right button, setup recording type

#### **RECORDING TYPE**

- 5. Frame: Adjust number of recording frames for each channel.
- 6. Pre : Pre- Alarm function. Setup record-starting time before event happens. (Second)
- 7. Post: Post- Alarm function. Setup the duration time of recording after event finishes. (Second)
- 8. Sensor Type: Select the sensor type. Normal Open / Normal Close Type
  - : Normal Close type sensor O : Normal Open type sensor
- 9.Time: Set the running time of the alarm control outputs
- 10. Alarm control
  - : D/O Alarm control off O : Alarm control on
- 11. Auto Camera Search: If you click this button, not received image channel from camera to log screen automatically. And then, it doesn't record the data in HDD.





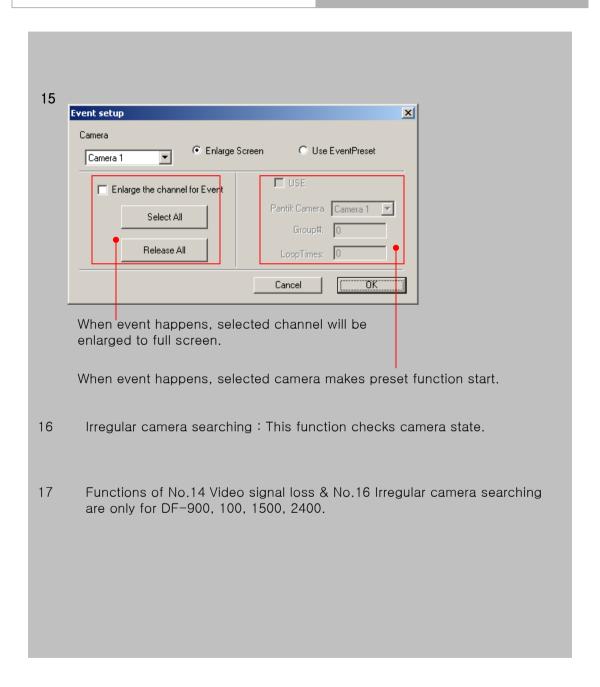
When stop input video signal, alarm will be started.

When stop input recording signal, alarm will be started.

13 Display history of MOTION and EVENT in search



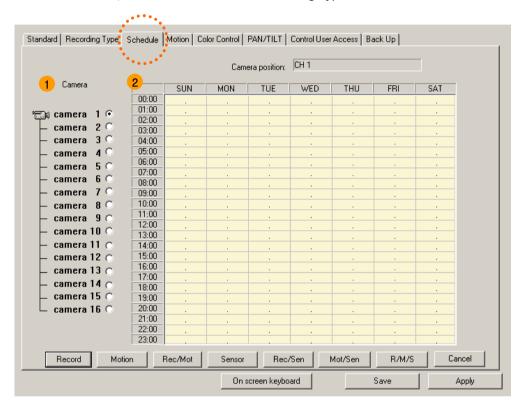
This function compensate weak video signal from camera.



#### **SCHEDULE**

#### 3 . Schedule

User has to setup "Schedule" in event of Recording Type.

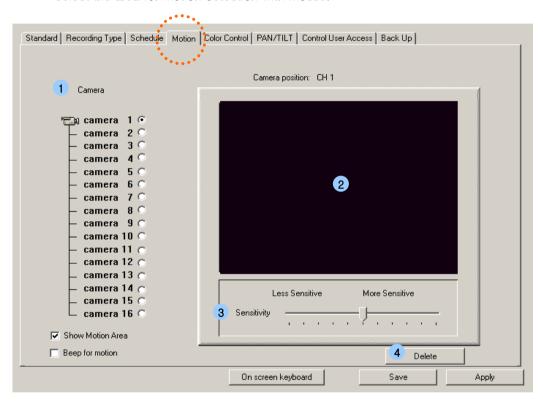


- 1. Select camera number to record by schedule.
- 2. Choose Record / Motion / Sensor at the desired day and time box.
  - Example: How to set a schedule
    - ① Choose a desired camera number
    - 2 Drag mouse to decide time table to record.
    - 3 Go back to SETUP/RECORDING TYPE to set Recording type as "Schedule"
    - When you want Motion Detection recording by schedule, Motion detection area and channels are must be set up correctly.

# **MOTION SETUP**

#### 4. Motion:

Select the area for motion detection with mouse.

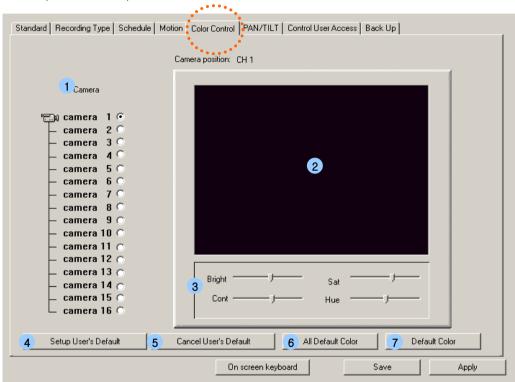


- 1. Channel: Select the specific camera
- 2. Motion area: To select motion detection area, move the mouse pointer to the desired area and select the range by dragging the mouse.
  No.of Motion detection area is available to set without limit.
- 3. Sensitivity: Move the bar to adjust the sensitivity of Motion detection
- 4. Delete: Deselect motion area.

#### **COLOR SETUP**

#### 5. Color Control

Setup the color of pictures.



- 1. Channel: Select a desired camera No.
- 2. Color area: The selected camera image is displayed.
- 3. Bright: Adjust brightness of the image.

**Saturation**: Adjust saturation of the image.

Contrast: Adjust contrast of the image.

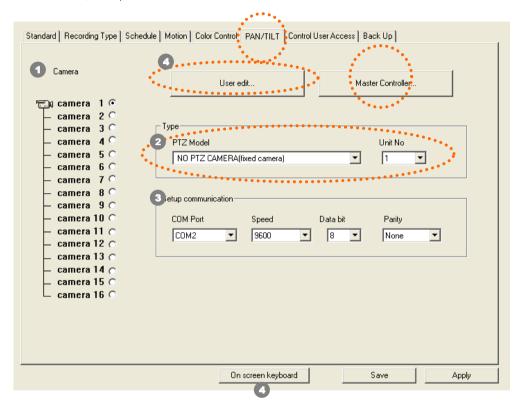
**Hue:** Adjust hue of the image.

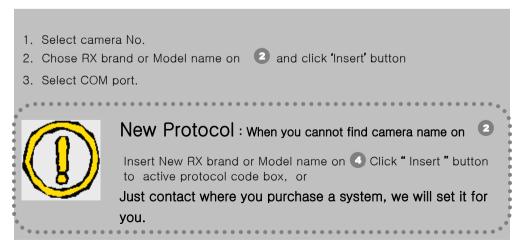
- \* Move the bar to adjust the images.
- 4. Setup User's Default : Setup your desired colors to Default Color
- 5. Cancel User's Default: Setup User's Default Color 4 to DVR Default Color.
- 6. All Default Color: Set All Camera to Default Color.
- 7. Default Color: Set a desired Camera to Default Color.

# **PAN / TILT**

#### 6. PAN/TILT

Insert PAN/TILT protocol code for brand new PAN/TILT Receiver.







#### 1. Unit# & Communication condition

- 1) Special feature
  - User can select different unit# each screen without concern for camera#
  - User can select baudrate, databits, parity
  - Therefore, DVR has a flexibility for PTZ camera setup and it will be possible to connect multi pantilt
- 2) How to use:
  - In SETUP screenClick [Port setup] button -> Select baudrate, datebits, parity and unit#.
- 3) Notice:
  - When user selected same PTZ camera & unit# in different camera#, if user operates one of them, both of them works.
- 2. Select "NO PTZ CAMERA"
  - Patilt function button will be not active.

- 3. Active button for each PTZ camera model
  - Supported function button will be active for camera kinds but others will be not active
- 4. Add function of Event preset
  - 1) When event happens, each screen will be worked by selected AUTOGROUP function.

#### Master Controller...

-"Master Joystick Controller ": Joystick Controller connect to DVR User can control PTZ by Joystick.

# Good point:

- 1) Easy and comfortable control for PTZ.
- 2) Remote control

#### 1. How to use

- Start "Master Joystick Controller use"
- When start function, you have to select controller and setup communication.
- If you don't use this function, should be better close.
- 1) Function START:
  - Click "Master Controller"
  - (1) Select controller product in "Setup Master Controller"
  - (2) Setup communication:
    - Select COMM port
    - Select Communication speed, databits, parity
  - (3) Click "OPEN Master Controller"

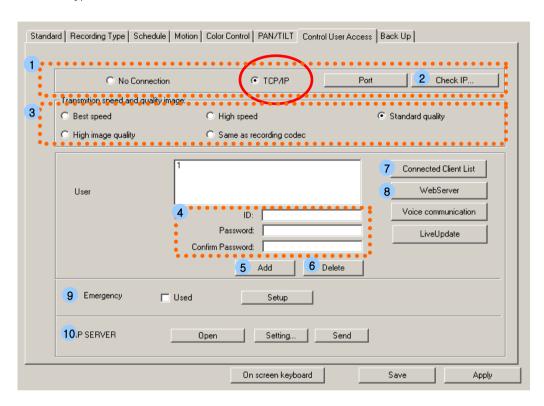
#### 2) Function STOP:

- Click "Master Controller"
- Click "CLOSE Master Controller"

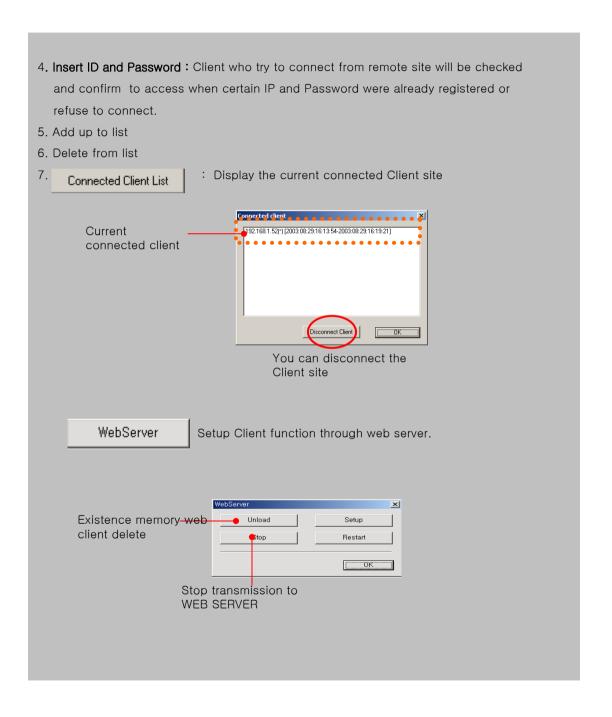
# **NETWORK**

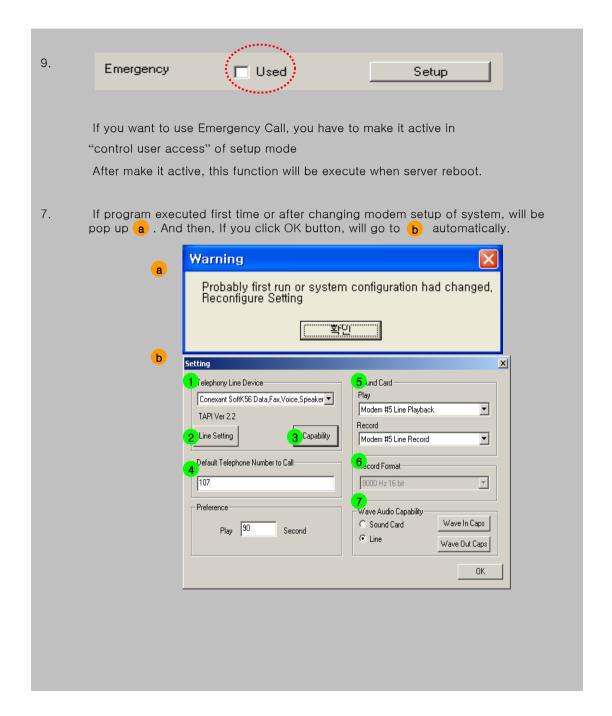
#### 7. Control User Remote Access

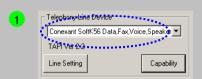
Select type of network



Select TCP/IP for Remote Access (TCP/IP, Modem etc.)
 Select No connection when you don't connect client site via network.
 Check IP address
 Transmission Speed and Image quality control.



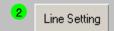




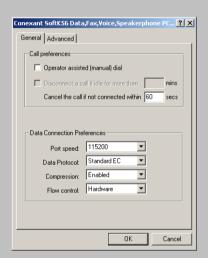
Telephony Line Device

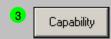
- -Modem information
- -Normally, you can see one modem name, but if computer has a several voice modem, will be show all of them. So, you can select one of them.

Conexant SoftK56 Data,Fax,Voice,Speaker 🔻



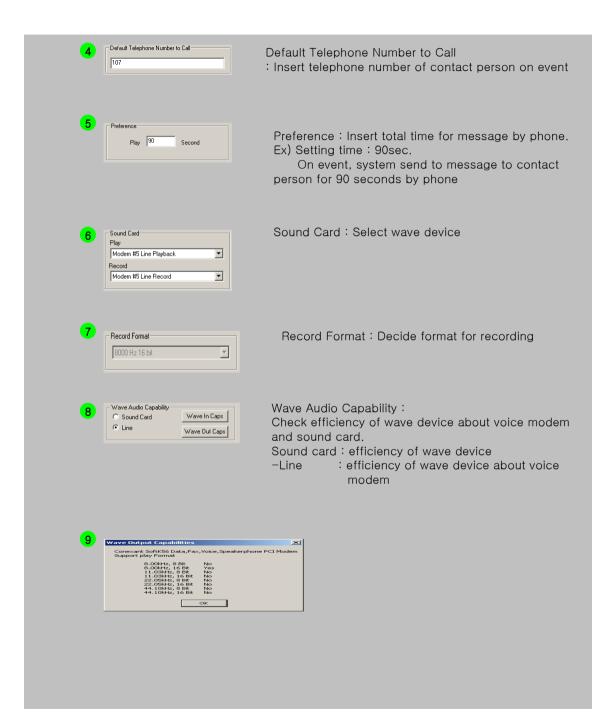
Click "Line Setting" button. You can set modem for your desire. Basically, Don't need change default setup.





Click button, you can see detail information of modem.





After finish setup will be pop up "Emergency call box". But when you finish setup, the box will be disappear automatically.

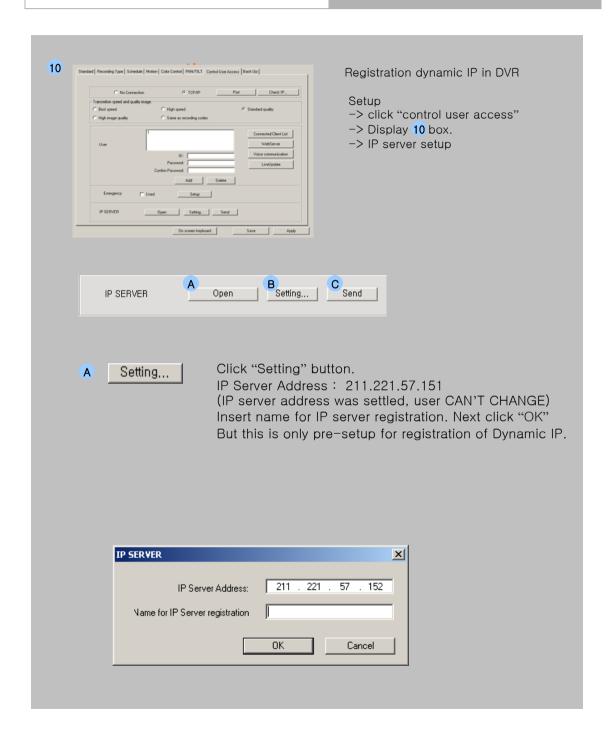


While executing Emergency Call program that system has a some problem, program will be finish after showing message box.





If program not perceptive voice modem, will be showing message and finish program.



## Send

After setting, Register to Dynamic IP server.

While your name transmit to Dynamic IP Server, If already your name is not exist, you will see message for success

But If already exist your name or registration same name again that system will be show "Already exist name"

We recommend execute this button only one time after setting.

But, If you want to register different DVR server name that you can execute after select other name in setting.

Open

This button make IP ON status in Dynamic IP Server. You can know server status in Dynamic IP server.



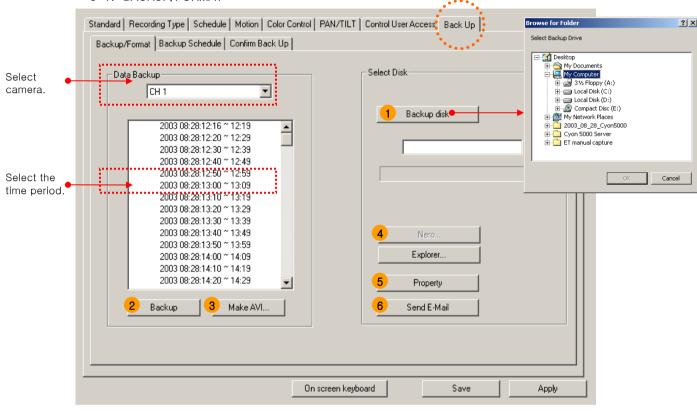
\*. When you register Dynamic IP sevrer first time, you have to execute Setting and Send

Also, we make "Open" button for your reference, this function was not required necessary. But if you use this function, it should be make a better system.

## **BACK UP**

#### 8. Back Up:

#### 8-1. BACKUP/FORMAT



#### Backup

1. Select a desired folder to save data.

(Click Backup disk button and then Browser for folder will be displayed.)

Select camera for data back up.

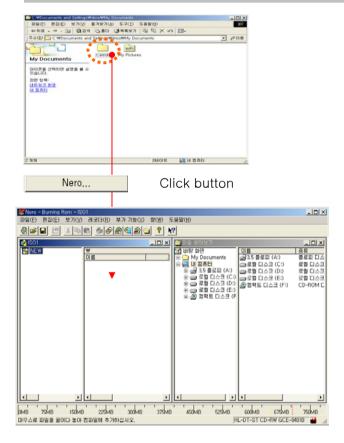
Drag a desired time to back up with mouse in the time table.

Click again the selected time period to deselect the time.

2. Click Backup button to start data backup.

Select a desired folder to save data.
 (Click Backup disk button and then Browse for folder will be displayed.)
 Select the time period for backup with mouse.
 Click again the selected time period to deselect the time.
 Click Backup button to start data backup.

 Click Explorer...
 will be displayed folder for saved backup data



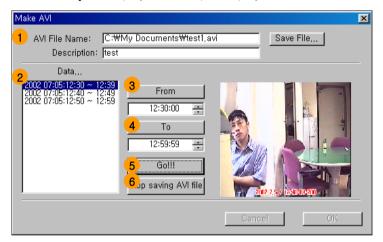
Saved DATA move to Nero Burning Rom. (EX: CAM00)

## Make AVI...

To make AVI file for saved DATA.

Send Email: Send AVI file via Email.

Play: Can play without special player. (ex: windows media player)

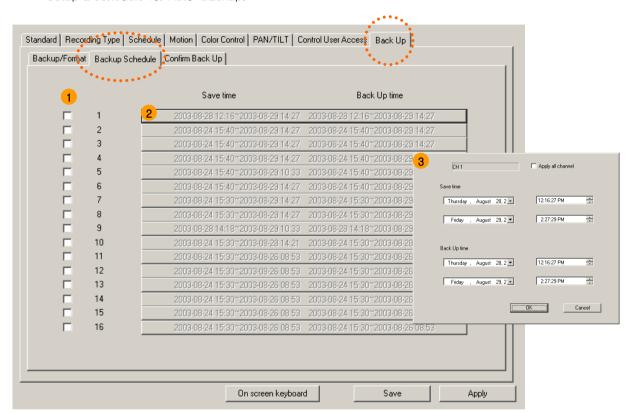


- 1. Insert Description
- 2. Select the desired time period for backup.
- 3. Click "From" to check first data time & image for AVI file
- 4. Click "To" to check last data time & image of desired AVI file
- 5. Click "Go" to make AVI file
- 6. Click "Stop saving AVI file" to stop making AVI file.

40

#### 8-2. BACKUP/SCHEDULE

Setup a schedule for Auto-backup.



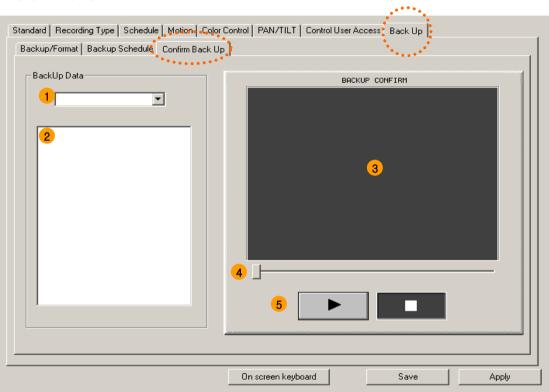
- 1. When you want auto back up, select camera and time to back up
- 2. By click, able to select recorded image data base, and recording reservation time.
- 3. Auto-backup Setup

Apply all channel: Select all camera.

Save time: Setup time period of Data for Auto-backup.

Backup time: Setup time for backup.

#### 8-3. BACKUP



Select Camera
 Backed up data list (time table.):
 Check Back Up data – Able to check whether back up data correctly or not.
 The image in box when press Play button is from back up media, not from HDD.

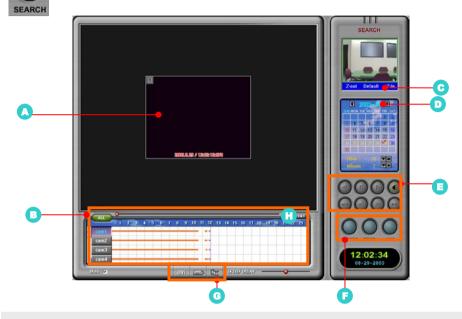
 Play to confirm back up image
 Slide bar to play.
 Play:

# 1. DVR SERVER

1-3. Search mode

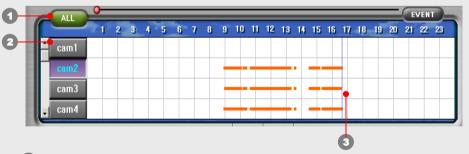
## **SEARCH Mode**

Go to "SEARCH" mode.

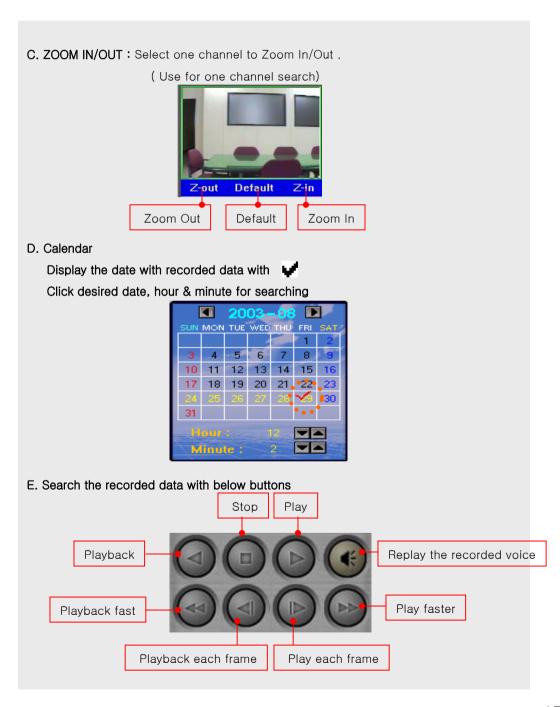


- A. Search screen
- B. Time table

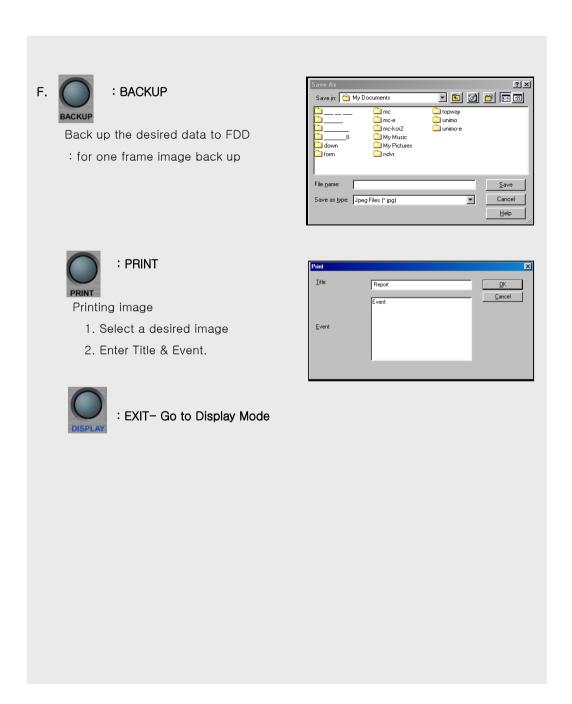
Display recorded data with red line along time



- 1 : Select all cameras for searching
- 2 : Select desired camera No. for searching
  - ( Multi- V : Add camera numbers to be selected at same time )
- 3: Move the Blue line for desired time for searching.



# 검색 모드





**Panoram**: You can search desired image from selected time successively.

This function support only one channel.





Call to screen keyboard





User can backup data through AVI during search.

If click AVI button during search, above window will be active.

After insert required article, user can save data.

In case of WINDOWS XP, user can backup CD by WINDOWS' itself recording function.

H. EVENT: Display history of MOTION & EVENT (refer to Page. 21)

# 2. CLIENT

# **1MULTI CLIENT**

a multi client b m to m

# 2 web client

#### **CLIENT**

After Installation of program as same way as server, Double-click



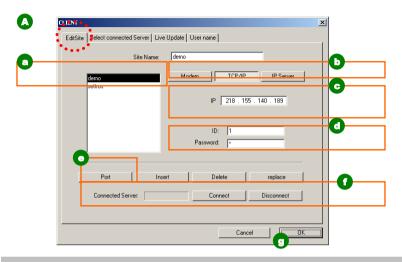
Icon.



#### Check VGA card:

If VGA card supports overlay, check it.
Otherwise, please don't check it.
Because sometimes image is not clear.



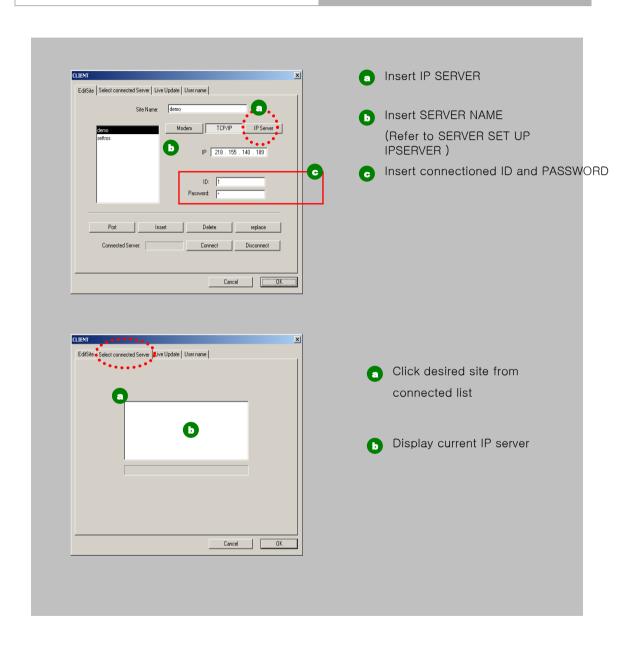


- a. Site Name: Insert name for a connected site
- b. Choose network connection type.Modem => Phone No.TCP/IP => IP Address
- c. Insert IP address for a connected DVR server
- d. Enter ID & Password for the site.
- e. Setup port



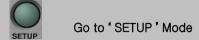
- f. Connect: Connect to the selected site.
- g. Cancel / OK : Cancel or OK for connection of server

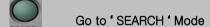
If you want to multi sever connection, please repeat this way.





- A. Camera Number / recording state.
  - ( : Camera No. / : Recording )
- B. 2003.3.24 / 19:22:22:767 Display time of sever system
- C. Select a screen division among 1/4/6/7/9/10/13/16Ch.
- D. Insert connected server IP address and Password
- E. Record displaying images of client site at client HDD.





Remote Search 1
Local Search 2
SEARCH

1. Remote Search:

Search images from server PC.

2. Local Search:

Search images directly from Client PC.

F. PAN/TILT On/OFF

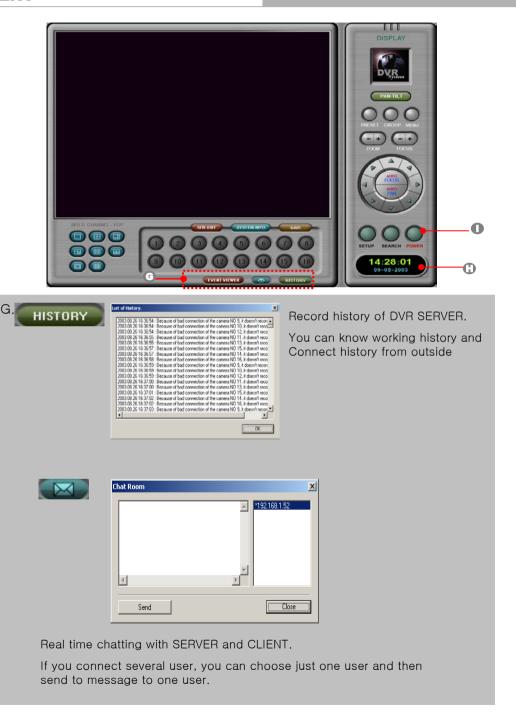


Local Search:

Client PC can record only present display images among images from Server PC.

(For example, if you select one channel on display mode, only present images is recorded on PC.

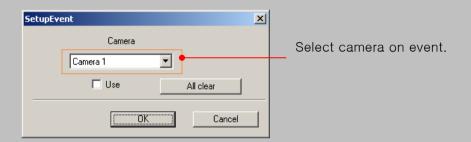
## **CLIENT**





On event, will be pop up screen. So, Increase to intensive efficient of monitoring.

But, This function need to event setting for connected server



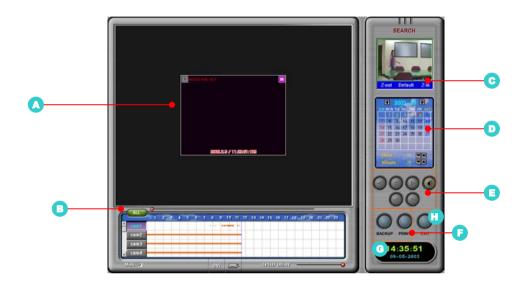


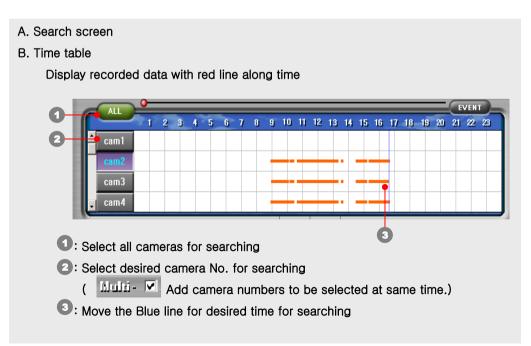
Display event description

- I. Power off: When you click the Power button, DVR system will be shut down.
- H. TIME: Display current time.

## **SEARCH**

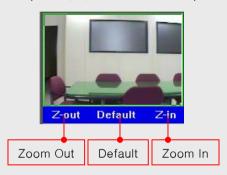
Go to "SEARCH" mode.





## C. ZOOM IN/OUT: Select one channel to Zoom In/Out.

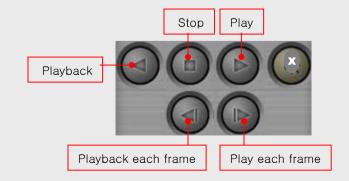
(Use for one channel search)



## D. Calendar



### E. Search the recorded data with below buttons



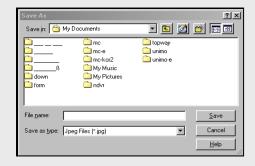
# 검색 모드

F.

#### : BACKUP

Back up a desired data to FDD to BMP or JPG file.

Only for one frame image back up.





## : PRINT

## Printing image

- 1. Select a desired image
- 2. Enter Title & Event
- 3. Send a image via E-mail





: EXIT - Go to display mode.

G



Call to screen keyboard.





User can backup data through AVI during search.

If click AVI button during search, above window will be active.

After insert required article, user can save data.

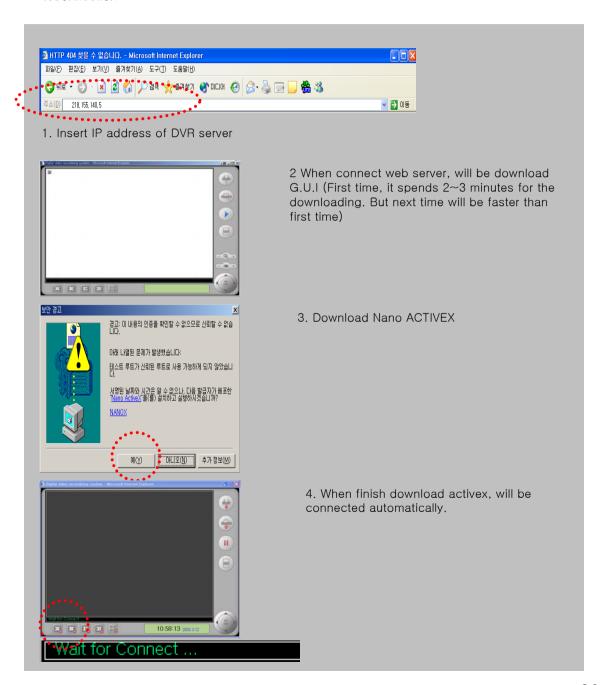
In case of WINDOWS XP, user can backup CD by WINDOWS' itself recording function.

H. EVENT: Display history of MOTION & EVENT (refer to Page. 21)

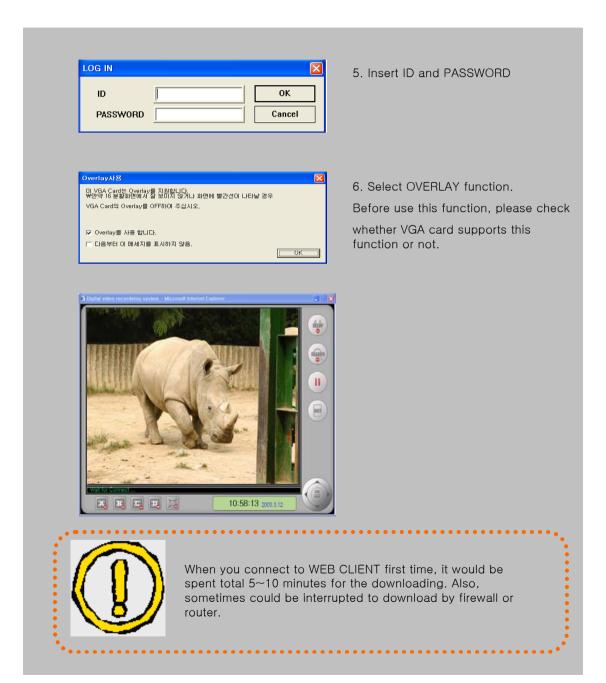
59

# Web client

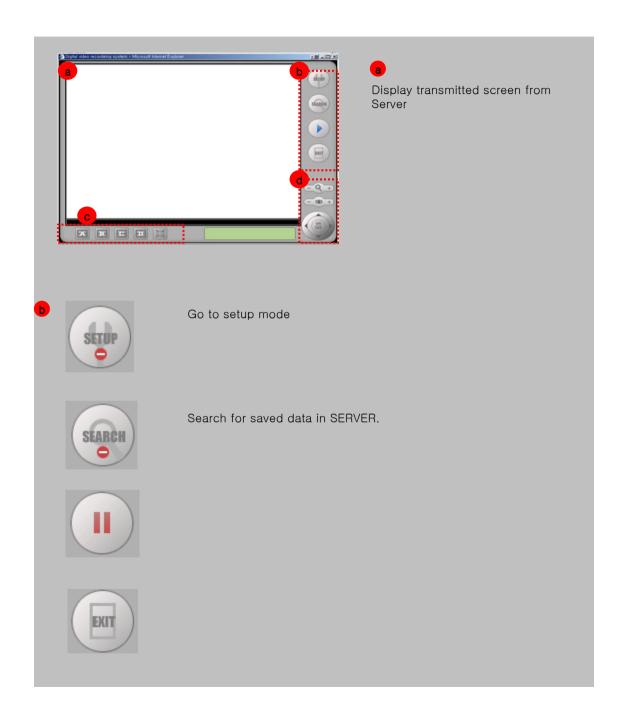
#### 1.Connection



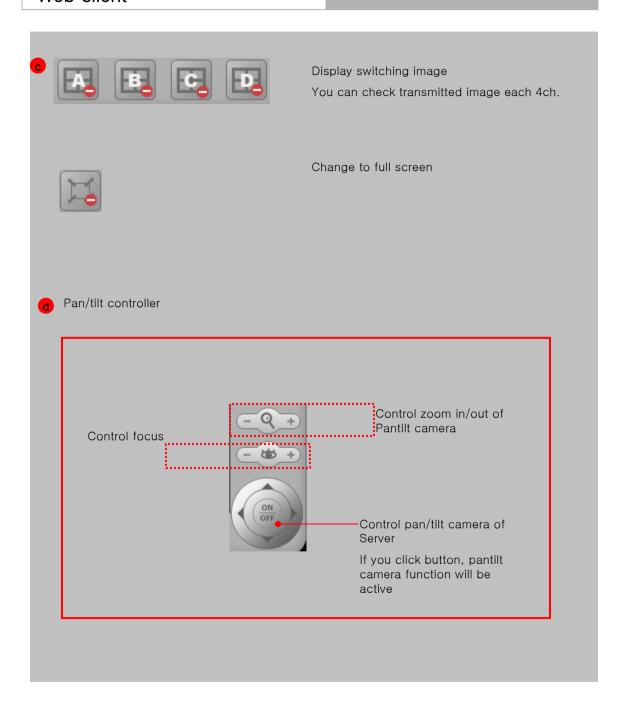
# Web client



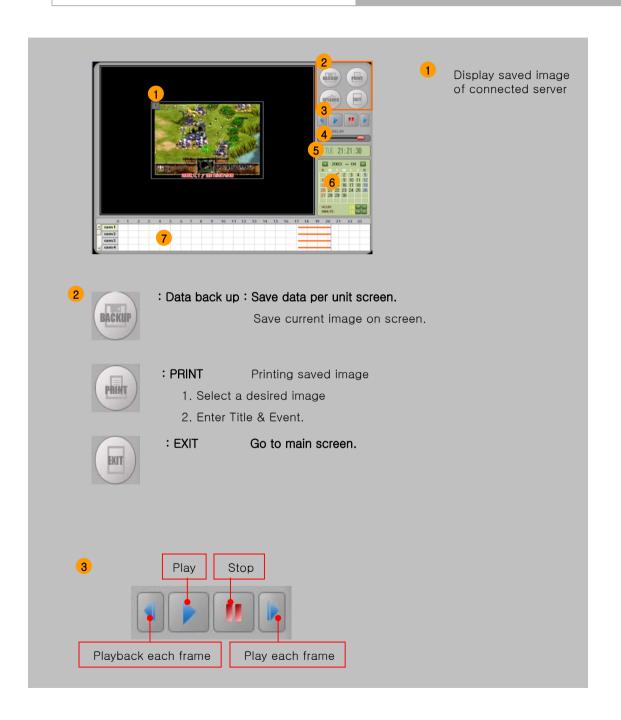
# Web client main



# Web client



# Web client search



# Web client

