

# UDR-9xxH DVR FULL MANUAL

(H.264 a Full HD Digital Video Recorder)



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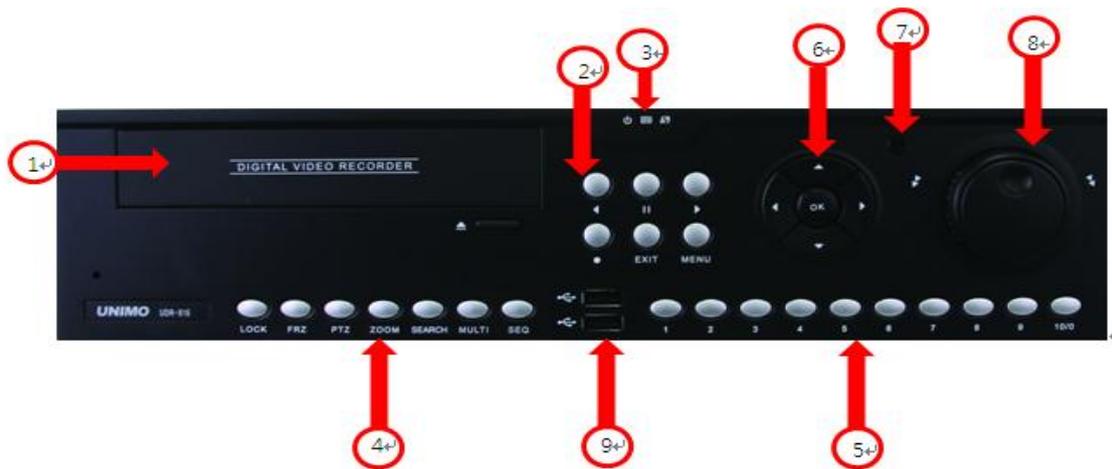
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# Chapter 1. Product Functions

Some of the functions may not be available depending on the product.

## 1.1 DVR Front Panel



### 1. CD/DVD R/W

- CD/DVD RW for backup and playback

### 2. Record/Play Buttons

- RECORD (●): Press this button to start recording manual except the continuous recording mode.
- PLAY (▶): Press this button to play in the live mode according to the predefined channel, start file and audio setting.
- R.PLAY (◀): Press this button to reverse-play while in the normal play mode.
- PAUSE (||): Press this button to pause playing while in the normal play mode.
- EXIT: Press this button to leave the menu. In the normal play mode, press this button to switch to the live image.
- MENU: Press this button to start the system setting menu and return to the upper menu while in the menu control mode.

### 3. LED Display

- POWER: When power is on, it turns on green.
- REC: When the video is being recorded, it turns on red.
- NETWORK: When the network is connected, it turns on green.

#### **4. Function Buttons**

- LOCK: This button is to prevent the unauthorized user from modifying the system. Press this button to lock the DVR. In the lock mode, if you press any key, the password window will pop up. Enter the password to unlock the system.
- FRZ (FREEZE): In the live mode, press this button to freeze the video. Press this button again to unfreeze the video.
- PTZ(Pan/Tilt/Zoom): In the live mode, press this button to enter the PTZ mode, and then control Pan/Tilt/Zoom/Focus. Press this button again to return to the live mode.
- ZOOM: In the live mode, press this button to zoom in or out a certain part of the video.
- SEARCH: Press this button to search videos stored on the HDD.
- MULTI: Press this button to decide the display mode of the 4CH DVR. Whenever this button is pressed in the live or playback mode, the screen is switched between one-display and four-display.
- SEQ (SEQUENCE): In the live with one channel selected, press this button to view channels according to the CAMERA\_SEQUENCE value.

**5. Numeric Buttons:** Press these buttons to select a channel, enter the password or the network IP in the live or playback mode.

#### **6. Direction Buttons**

- UP: Press this button to move the cursor upward and select an item to be controlled in the menu. This button raises the camera in the PTZ mode and switches channels in the playback mode.
- DOWN: Press this button to move the cursor downward and select an item to be controlled in the menu. This button lowers the camera in the PTZ mode and switches channels in the playback mode.
- LEFT: Press this button to change the setting in the menu. This button turns the camera to the

left in the PTZ mode and slows play speed in the playback mode.

- RIGHT: Press this button to change the setting in the menu. This button turns the camera to the right in the PTZ mode and accelerates play speed in the playback mode.

- OK: Press this button to apply the selected item in the menu. In the live mode, press this button to go to the channel selection mode. Press this button again to display the camera change menu. For more information on the camera change menu, see "3.12 Camera Change Setting Menu."

## 7. IR Reception Terminal

- This terminal receives IR data from the remote controller.

## 8. Jog/Shuttle

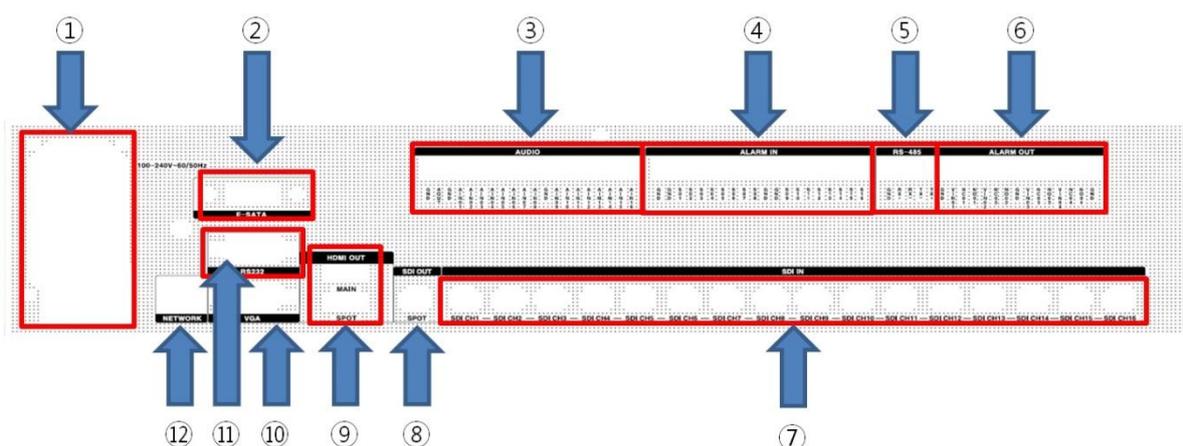
- JOG: Use this button to view stored images one by one in the forward or reverse direction.

- SHUTTLE: Use this button to fast-forward or reverse the video.

9. **USB (2EA)**: The USB port is used to back up videos or captured still images on the HDD.

Also, the USB mouse enables easy DVR operation.

## 1.2 DVR Rear Panel



### 1. Power

- Power for the device ( Free Voltage Adaptor AC 100V ~ 240V ( 50Hz-60Hz ) / 200Watt)

## **2. e-Sata 1EA**

- e-SATA connector for external HDD expansion

## **3. AUDIO IN/OUT**

- Sound in via the microphone and sound out via the speaker

## **4. ALARM IN (SENSOR)**

- Up to 16 NO or NC sensors can be connected. In the menu, you can select the mode or set the connection with the input channel (depending on the model).

## **5. RS-485**

- RS-485 SERIAL TYPE: The external controller can be controlled via RS-485 serial communication. Also, external PTZ control is possible.

## **6. ALARM Output (NO, COM, NC)**

- When an alarm occurs, the relay provides contact output while it is on. The user can select one of NO, COM or NC according to the connected alarm device. The NO (normal OPEN) contact is away from the COM (common) contact in normal operation but touches it when an alarm occurs. The NC (normal Close) contact is contacting the COM (common) contact in normal operation but becomes away from it when an alarm occurs.

## **7. VIDEO IN(HD)**

- IN: Camera input port. Differ by model.

## **8. SPOT**

- The general SPOT terminal can be used for output.

## **9. HDMI**

- The HDMI port can be used to output main and SPOT signals on the monitor.

## **10. VGA**

- The VGA terminal can be used for monitor output.

## **11. RS-232**

- Control can be done via RS-232 serial communication.

## 12. Ethernet

- The (10/100/1000 Mbps) RJ-45 connector can be used for Internet connection.

## 1.3 Remote Control and Accessories

- See followings.



### \* Correct Batteries

**Warning:** Risk of explosion if battery is replaced by an incorrect type.

**Dispose of used batteries according to the instructions.**

### 1.3.1 How to Use the Remote Control

- ID: You can set the DVR ID, and then control the DVR according to the remote control setting.

Follow below steps.

1. Set the SYSTEM\_GENERAL unit address in the DVR before setting the ID (Default: 00).

2. With the ID button pressed, enter the ID number to the DVR, and then released the ID button to finish ID setting. If the DVR unit address is "1," enter "01" for the remote control ID.

3. Up to 20 remote control IDs can be used (0 to 19).

- REC: Press this button to record manually in the urgent situation.

- LOCK: Press this button to lock the DVR. It works the same as the LOCK button on the DVR front. To unlock the DVR, press any button, and then enter the password.

- FRZ: Press this button to freeze the video. It works the same as the FRZ button on the DVR front. To release FRZ, press the FRZ button again.

- PTZ: Press this button to enable the PTZ camera. PTZ should be set in the DVR camera.

- ZOOM: Press this button to magnify the video on the channel. It works the same as the ZOOM button on the DVR front.

- SEQ: It works the same as the SEQ button on the DVR front.

- MULT: It works the same as the MULTI button on the DVR front.

- SEARCH: Press this button to search videos or captured still images stored on the HDD. It works the same as the SEARCH button on the DVR front.

- MENU: Press this button to open the DVR menu. You can select various submenus.

- EXIT: Press this button to exit the menu and switch to the live mode.

- PLAY Group: It works the same as the Playback Start, Stop, Pause, R.PLAY buttons on the DVR front.

## Chapter 2. Basic Operation

### 2.1. Power ON/OFF

#### 2.1.1 Power ON

- When you plug in the product, the POWER LED turns green to indicate power is supplied to the DVR stably. According to HDD capacity, there can be a time difference in booting. While booting is going on, the progress bar at the bottom indicates booting status. When booting is complete, OSD (On Screen Display) is displayed. Then, the user can operate the DVR at his/her discretion.

#### 2.1.2 Power OFF and Reboot

- To shut down the DVR system, press SHUTDOWN in the system setup menu. When the password window opens, enter the user password (default: 111111) to shut the DVR system. After the correct shutdown message appears, remove the power cable (adapter) from the rear panel.

- To reboot the system, press RESTART in the system setup menu. When the password window opens, enter the user password (default: 111111) to restart the DVR system.

#### 2.1.3 Date and Time Setting

- Enter the date and time to the DVR system. Then, go to Date/Time and press OK to apply entered date and time.

#### 2.1.4 ID and Password Setting

- Set the user ID and password for the DVR system.

#### 2.1.5 Network Setting

- Select the network type setting in the menu. STATIC, DHCP and DDNS are supported.

### 2.2 Recording

#### 2.2.1 Recording Setting

- Go to Recording Setting in the menu to set details. The resolution is automatically decided according to the camera input resolution. Supported resolutions are 720P, 1080i or 1080P.

\* Note: Select the same resolution for the HD camera, and then select the input for each

channel.

(EX) Scenario 1: 720p for all HD channels; Scenario 2: 1080p for all HD channels; Scenario 3: 1080i for all HD channels; Scenario 4: AUTO)

Also, you can decide which audio is connected to which video channel and set recording quality for each channel. Four recording qualities are available: NORMAL, LOW, HIGH, and HIGHEST. You can set different or the same quality for each channel. Lastly, you can select recording conditions. For more information, "see 3.2 Recording Setting Menu in the Full Manual."

### **2.2.2 Recording Condition Setting**

- You can choose one of REC1, REC2, REC3 and NONE according to schedule settings. You can record according to recording settings - REC1, REC2, and REC3. For more information, "see 3.2 Recording Setting Menu in the Full Manual."

## **2.3 Play**

### **2.3.1 Play with the PLAY Button**

- Press the PLAY button to play the video according to the channel, play start point and audio setting selected in the menu.

### **2.3.2 Audio Play**

- To play the audio-linked file, select the channel, and then click on the RIGHT button. Then, the audio menu appears. Turn on audio and click on PLAY to play the audio.

Or, in the front panel of the DVR, press OK, select the channel, and press OK again to display the audio menu. Turn on audio and click on PLAY to play the audio.

## **2.4 Search**

The DVR has four search modes.

### **2.4.1 Search Modes**

- Quick Search: Enter YYYY/MM/DD for quick search.
- Calendar Search: The calendar search environment is provided to enable the user to view recording data at a glance.

- Event Search: The recording data list is displayed for ALRAM, MOTION, VIDEO LOSS events.
- OVERLAPPED LIST: The list of data overlapped overtime.

## **2.4.2 How to Search**

- Quick Search: Press the Search button to show four search modes. Select TIME, enter YYYY/MM/DD, and then press OK to play channels of the selected time simultaneously.
- Calendar Search: Press the Search button to show four search modes. Select CALENDAR to display the YYYY/MM/DD window. Select the year, month, date, hour and minute step by step to play channels of the selected time simultaneously.
- Event Search: Press the Search button to show four search modes. Select EVENT, turn on/off search conditions, and then select the LOG list to show the event list. Then, select the desired event list to play channels simultaneously.
- OVERLAPPED LIST: Press the Search button to show four search modes. Select OVERLAPPED LIST to display the list of data overlapped overtime. Then, select the desired list to play channels simultaneously.

## **2.5 Backup**

### **2.5.1 DVD-RW (Option)**

- Insert the DVD-ROM to the DVD-RW drive, press the Menu button, and then use the backup menu to back up videos on HDD for a certain period of time to the DVD-ROM.
- In the Backup menu, select DVD/RW as a target, select the backup time/backup file name/backup channel, and then select WRITE to start backup. (If ESTIMATE is selected, the selected backup volume is calculated.)
- Since our Uniplayer PRO is included in the backup CD/DVD, videos can be played in other PCs.
- Backup files can be played by Uniplayer PRO on the CD supplied with the DVR.

### **2.5.2 USB Memory**

- Files can be backed up to the USB memory connected to the USB port. Connect the USB memory and use the system setting and backup menu to back up videos on HDD for a certain

period of time to the USB memory. (Up to 32GB USB memory is recognized.)

- Connect the USB memory, select USB as a target, select the backup time/backup file name/backup channel, and then select WRITE to start backup. (If ESTIMATE is selected, the selected backup volume is calculated.)
- Since our Uniplayer PRO is included in the backup CD/DVD, videos can be played in other PCs.
- Backup files can be played by Uniplayer PRO on the CD supplied with the DVR.

### **2.5.3 Network**

- Video and audio files on the DVR HDD can be backed up to user's PC via the network from the remote area.

## **2.6 Client Program**

### **2.6.1 RAMS PRO**

- This program can access the DVR to monitor live video, search and play data on the DVR, and back them up to the client over the network.
- DVR S/W upgrade
- Run RAMS PRO, and press the button to show the DVR list window. In the Connect window, create a group, enter the name, address, port, ID and password of the DVR to be accessed, and then press the ADD button to save them.
- Default value: "PORT: 7000; ID: ADMIN; PASSWORD: 111111"

### **2.6.2 Uniplayer PRO**

- With this program, you can play files recorded, captured or backed up by RAMS PRO.

### **2.6.3 Mobile viewer**

- With the PDA or smartphone with access to the wireless Internet, DVR status and videos can be monitored in real time.
- i-RAMS pro: real-time DVR status and video monitoring program for the i-Phone
- a-RAMS pro: real-time DVR status and video monitoring program for the Android phone

## Chapter 3. Main Menu Configuration



- Place the cursor at the bottom or press the DOWN button on the DVR front. Then following menus appear.



SEARCH



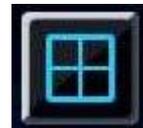
SETUP



BACKUP



1CH



4CH

-SEARCH: Search for record data

-SETUP: DVR setup

-BACKUP: Backup settings

-1CH: 1-channel display

-4CH: 4-channel display

### 3.1 Camera Setup Menu



Figure 3.1 Camera Menu Screen

#### 3.1.1 Camera Setup



Figure 3.1.1 Camera Setup Screen

- CAMERA LABEL: Camera label (ALL, NAME, NUMBER or OFF)
- RESOLUTION: Camera input resolution (720P, 1080i, 1080p or Auto)
- NAME: Camera name for each channel

- INSTALL: Turn on or off the camera for each channel.
- HIDDEN: Hide the camera for each channel. (Though the camera is on, its video is hidden.)

### 3.1.2 PTZ Setup



Figure 3.1.2 PTZ Setup Screen



- PORT: RS-485 setting for PTZ control. Baud Rate/Data Bit/Parity Bit/Stop Bit can be set.



- ID: Up to 256 PTZ IDs can be selected. During PTZ control, this ID is checked internally. Only when the ID matches the PTZ device, control is available.



- TYPE: Select the wanted PTZ model. If the PTZ model is not used, select "NONE".

### 3.1.3 Sequence Setup

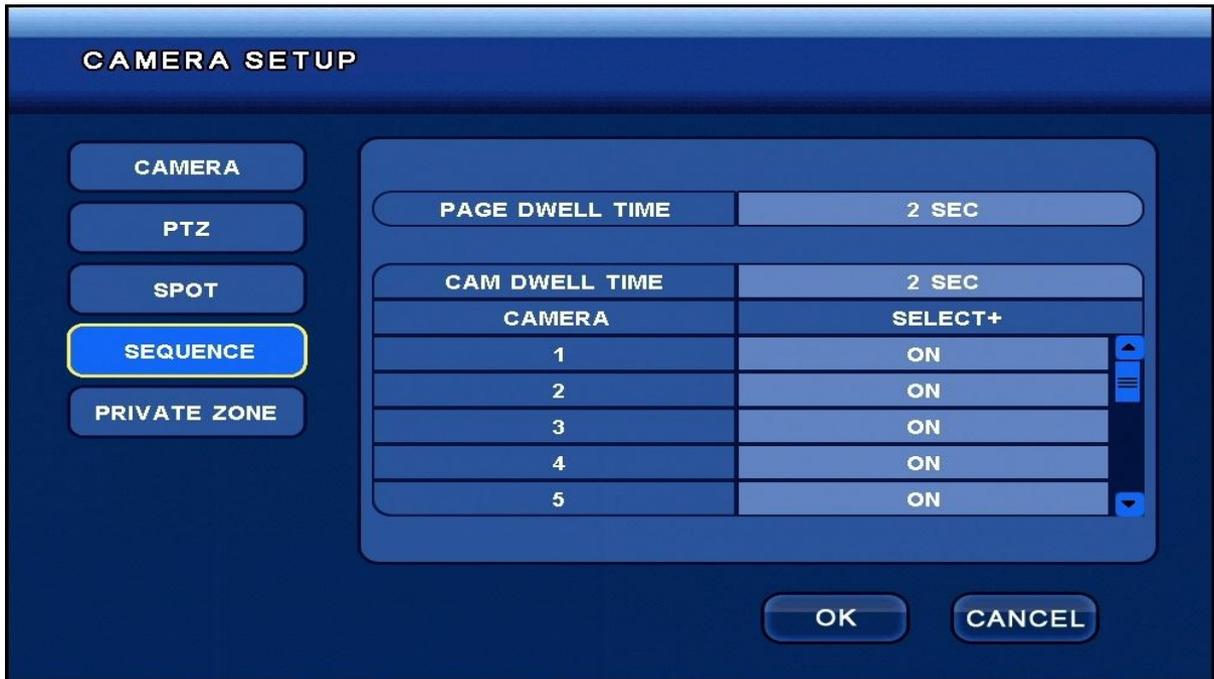


Figure 3.1.3 Sequence

- PAGE DWELL TIME: The page is displayed for the dwell time before it is switched.
- CAM DWELL TIME: Only the selected camera screen is displayed for the dwell time before it is switched.



### 3.1.4 Private Zone Setup

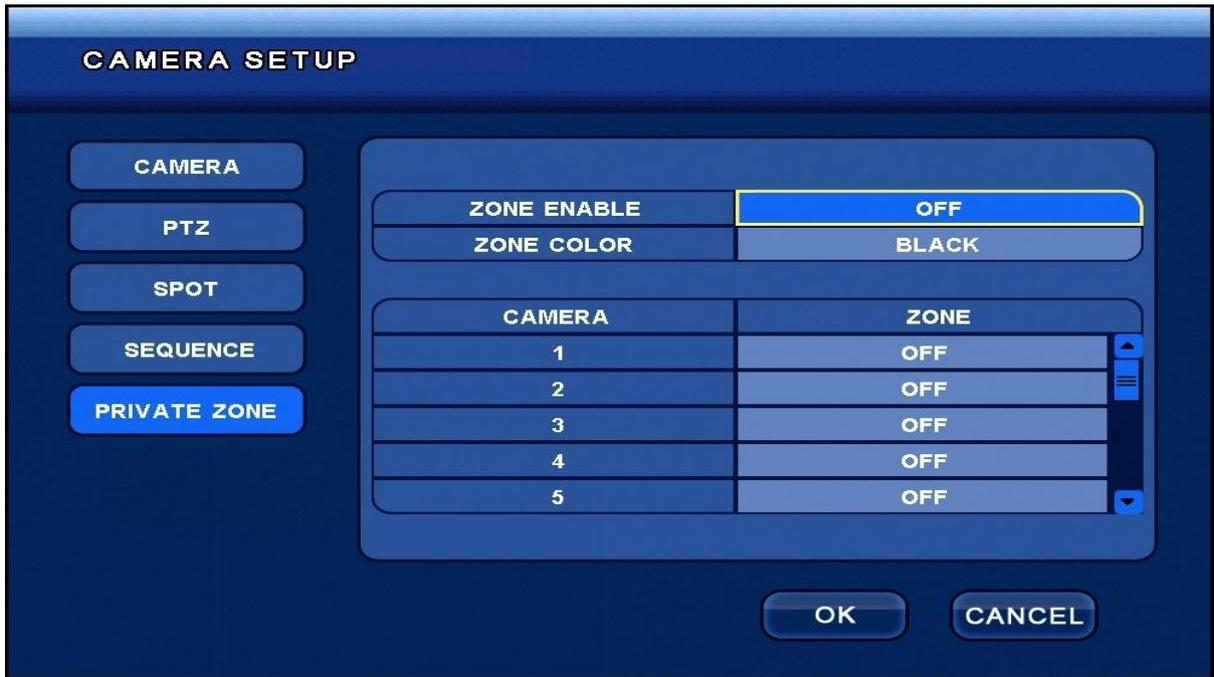
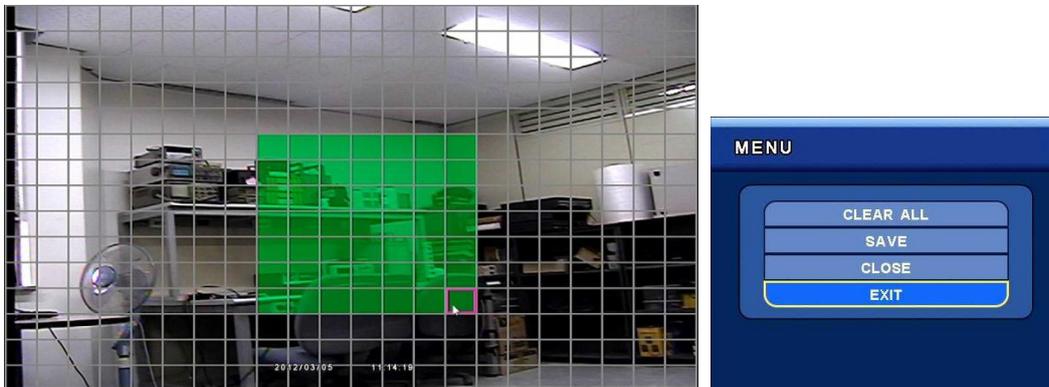


Figure 3.1.4 Private Zone

-ZONE ENABLE: LIVE/PLAYBACK/LIVE+PLAYBACK are available.

-ZONE COLOR: Color for the private zone



EX) Click on ZONE, and then use the mouse or front direction keys to set the private zone. And then, use the right mouse key or front menu key to save it.

### 3.2 Record Setup Menu



Figure 3.2 Record Menu Screen

#### 3.2.1 Schedule Setup

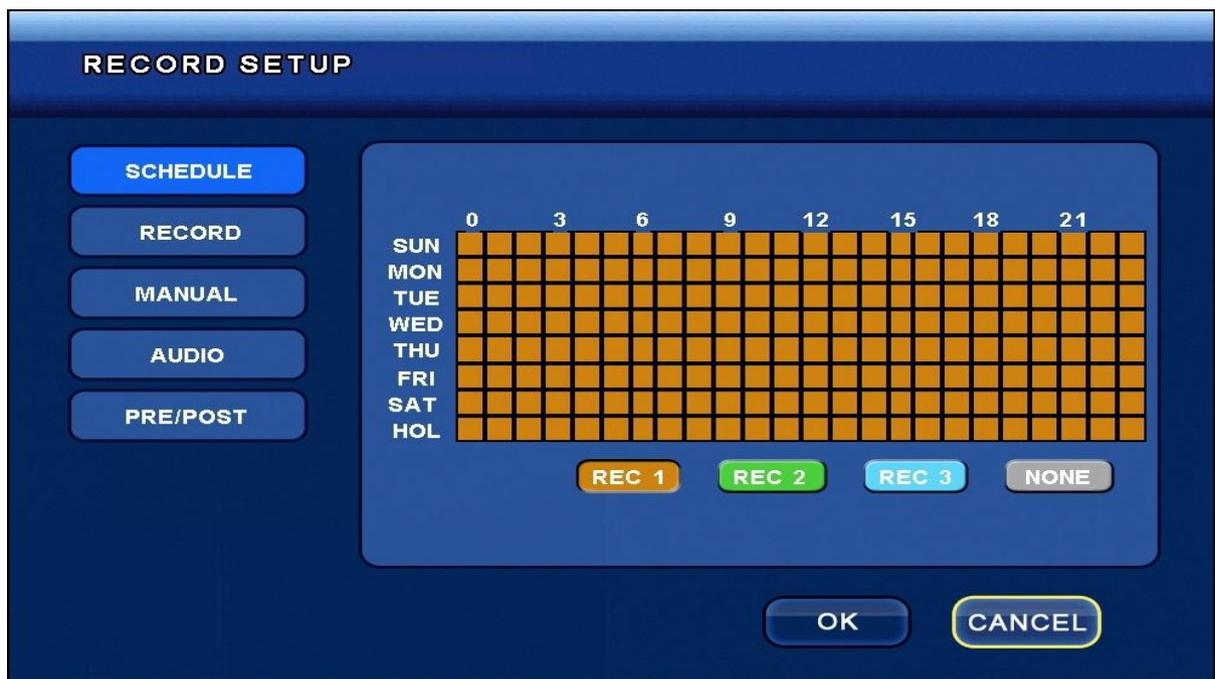


Figure 3.2.1 Schedule

-REC1: Click on REC1 and drag the pointer, or use the direction key or remote control to select REC1 to select the desired area. (Recording starts according to FPS and resolution selected for REC1.)

-REC2: Click on REC2 and drag the pointer, or use the direction key or remote control to select REC2 to select the desired area. (Recording starts according to FPS and resolution selected for REC2.)

-REC3: Click on REC3 and drag the pointer, or use the direction key or remote control to select REC3 to select the desired area. (Recording starts according to FPS and resolution selected for REC3.)

### 3.2.2 Record Setup



Figure 3.2.2 Record Setup

-REC1: Setup for SCHEDULE REC1

TIME ->(FPS and quality for the time set for REC1)

EVENT->(FPS and quality for the event set for REC1)

-REC2: Setup for SCHEDULE REC2

TIME ->(FPS and quality for the time set for REC2)

EVENT->(FPS and quality for the event set for REC2)

-REC3: Setup for SCHEDULE REC3

TIME ->(FPS and quality for the time set for REC3)

EVENT->(FPS and quality for the event set for REC3)

### 3.2.3 Manual Setup



Figure 3.2.3 Manual

Set default values when NONE is set for the schedule.

-FPS: Frame for each channel (1, 2, 3, 4, 5, 6, 7.5, 10, 15, 30 FPS)

\* For FPS settings, see 5.3 Appendix C.

-QUALITY: Quality for each channel (NORMAL, LOW, HIGH or HIGHEST)

-AUDIO: Audio On/Off for each channel

### 3.2.4 Audio Setup



Figure 3.2.4 Audio

[AUDIO]: Audio On/Off for each channel

OFF: Audio is not included in the record file.

### 3.2.5 PRE/POST Setup



Figure 3.2.5 PRE/POST

[PRE/POST]

-PRE RECORD: Time before recording starts.

-POST RECORD: Time after recording ends.



### 3.3 Event Setup Menu



Figure 3.3 Event Menu Screen

### 3.3.1 Motion Setup



Figure 3.3.1 Motion

[MOTION]

- ACTIVE+: Motion detection On/Off



[Level Setup]

-LEVEL+: 1~5 detection levels



-AREA+: Drag the mouse pointer or use the front direction key to set the detection area. And then, save it to finish motion area setup.

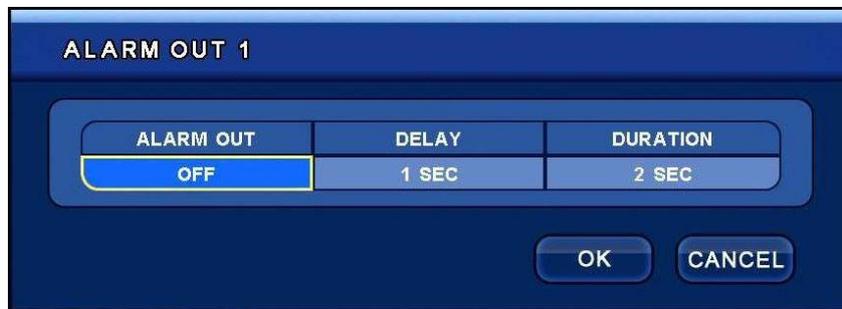


Figure 3.3.1-1 Motion\_Action

[ACTION]: Activated when the event occurs in the motion detection area.

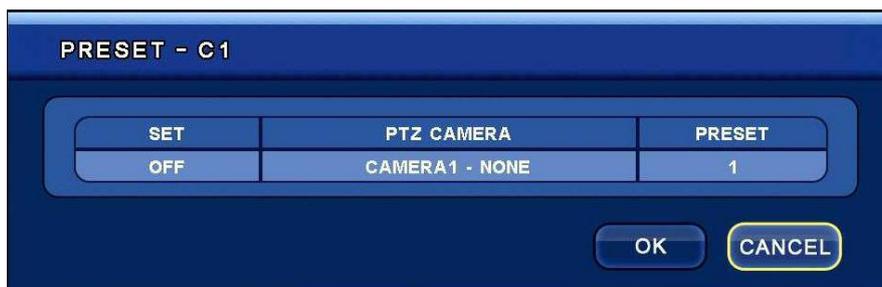


-RECORD: Recording starts when the event occurs in the motion detection area of the selected channel.



-ALARM: The alarm sets off when the event occurs in the motion detection area.

-BUZZER: The buzzer is enabled or disabled when the event occurs in the motion detection area.



-PRESET: The camera moves to the preset position when the event occurs in the motion detection area.



-E-MAIL: The log is e-mailed to the designated address when the event occurs in the motion detection area.

### 3.3.2 Event Alarm In Setup



Figure 3.3.2 Alarm In

[INPUT]

-ACTIVE+: Alarm Input ON/OFF

-NAME: Alarm input name

-TYPE+: Alarm input type (NO: Normal Open / NC: Normal Close)



Figure 3.3.2-1 Alarm In\_Action

[ACTION]

Activated when there is an event linked to the alarm input just as Motion\_Action

### 3.3.3 Video Loss Setup



Figure 3.3.3 Video Loss

[INPUT]

- ACTIVE+: Event On/Off in case of video loss



[ACTION]

Activated when there is an event linked to the video loss just as Motion\_Action

### 3.3.4 System Setup

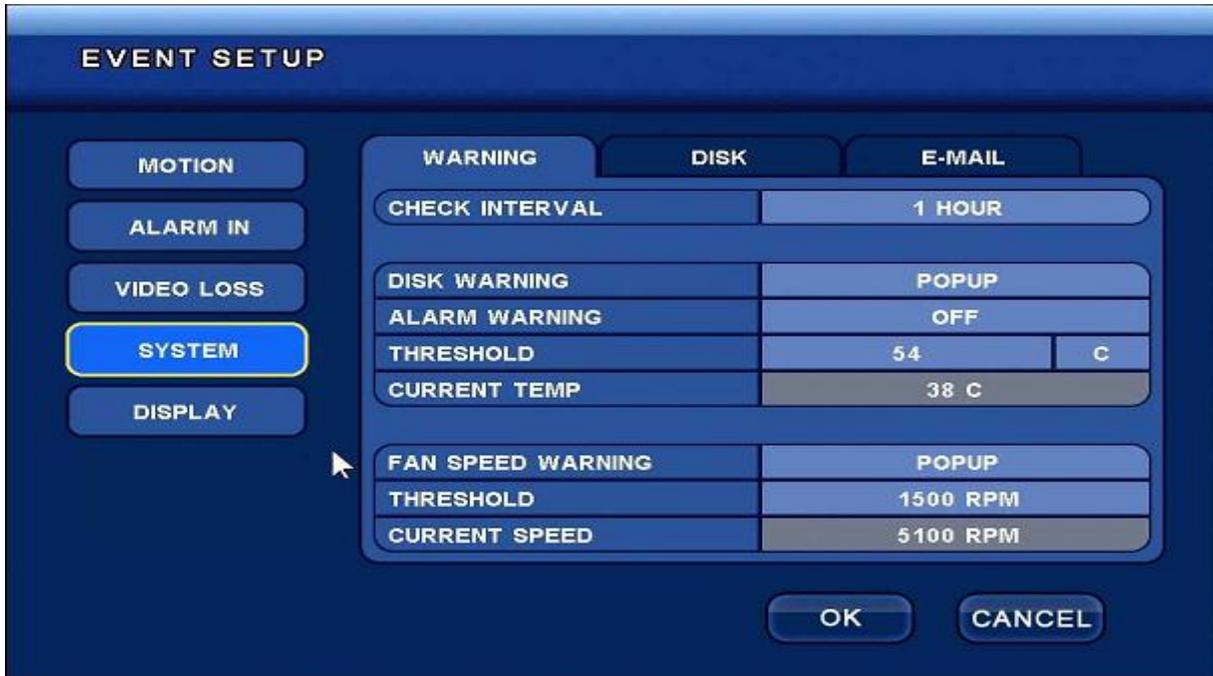


Figure 3.3.4 System

[WARNING]

-CHECK INTERVAL: Interval for system environment checkup (Choose one between 1 hour and 24 hours)

-DISK WARNING: Warning when there is a problem in the disk. (POPUP+BUZZER, POPUP, or OFF)

-ALARM WARNING: Alarm is enabled or disabled when there is a problem in the system environment. (OFF, ALARM OUT No.)

-THRESHOLD: Warning temperature (C: 0~100, F: 32~212)

-CURRENT TEMP: Current temperature

-FAN SPEED WARNING: Warning when there is a problem in the fan. (POPUP+BUZZER, POPUP, or OFF)

-THRESHOLD: Fan warning speed. If the fan runs slower than the designated speed, the alarm is on.



Figure 3.3.4-1. System

[DISK]

-DISK FULL WARNING: Warning when the disk is full

-USED SPACE: Warning level for the used space

-ALARM: Output to the alarm

-BUZZER: Buzzer On/Off

-MESSAGE: Message On/Off



Figure 3.3.4-2. System

[E-MAIL]

- Set it on to send e-mail (POWER, MENU, LOGIN, DISK FULL, S.M.A.R.T.).

### 3.3.5 Display Setup



Figure 3.3.5 Display

-DISPLAY+: Display the popup or icon for a designated time.

-EVENT ICON: Icon On/Off in case an event occurs.

-EVENT POPUP: Popup On/Off in case an event occurs.

### 3.4 Playback Setup Menu



Figure 3.4 Playback Menu Screen

#### 3.4.1 Playback Setup

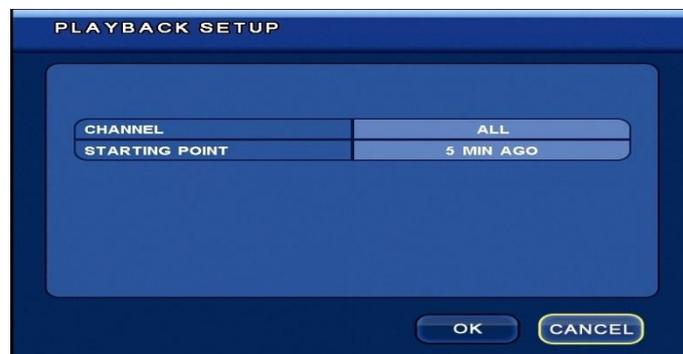


Figure 3.4.1 Playback

-CHANNEL: In the live mode, press the PLAY button on the DVR front or remote control to select the channel. Select ALL to play all channels at the same time.

-STARTING POINT: Decide the starting point in case of manual play. Available options are: 5 minutes ago, 30 minutes ago, 1 hour ago, 6 hours ago, 12 hours ago, 24 hours ago, and First.

### 3.5 Display Setup Menu



Figure 3.5 Display Menu Screen

#### 3.5.1 Display Setup



[Figure 3.5.1 Display]

-DISPLAY SETUP: HDMI Resolution, Filter, Border Color, Alpha Blending and Display Position can be set.



- HDMI: Resolution of the main monitor

Available options are as seen above.



#### WARNING

- If a high resolution is selected for the low resolution monitor, it is not possible to display the image. In this case, use the numeric buttons to enter "123+123+123", and then press OK. This will switch the resolution to a default of 1280\*720p 60Hz and display the image.

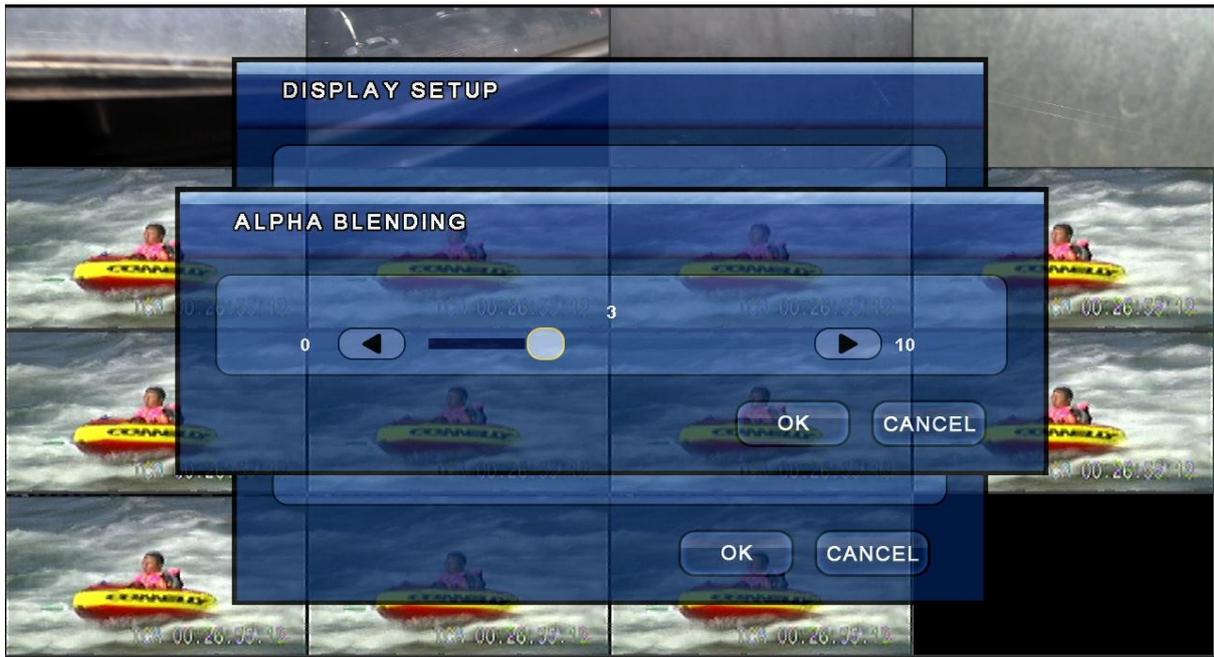
- FILTER: Improve quality.

When it is on, Deinterlace is applied to smoothen the display.

- BORDER COLOR: Set the border color as grey or black.

- ALPHA BLENDING: Set transparency of the menu screen.

- DISPLAY POSITION: Set the position of the menu window.



### 3.6 Network Setup Menu



Figure 3.6.1 Network Menu Screen

### 3.6.1 Network Setup

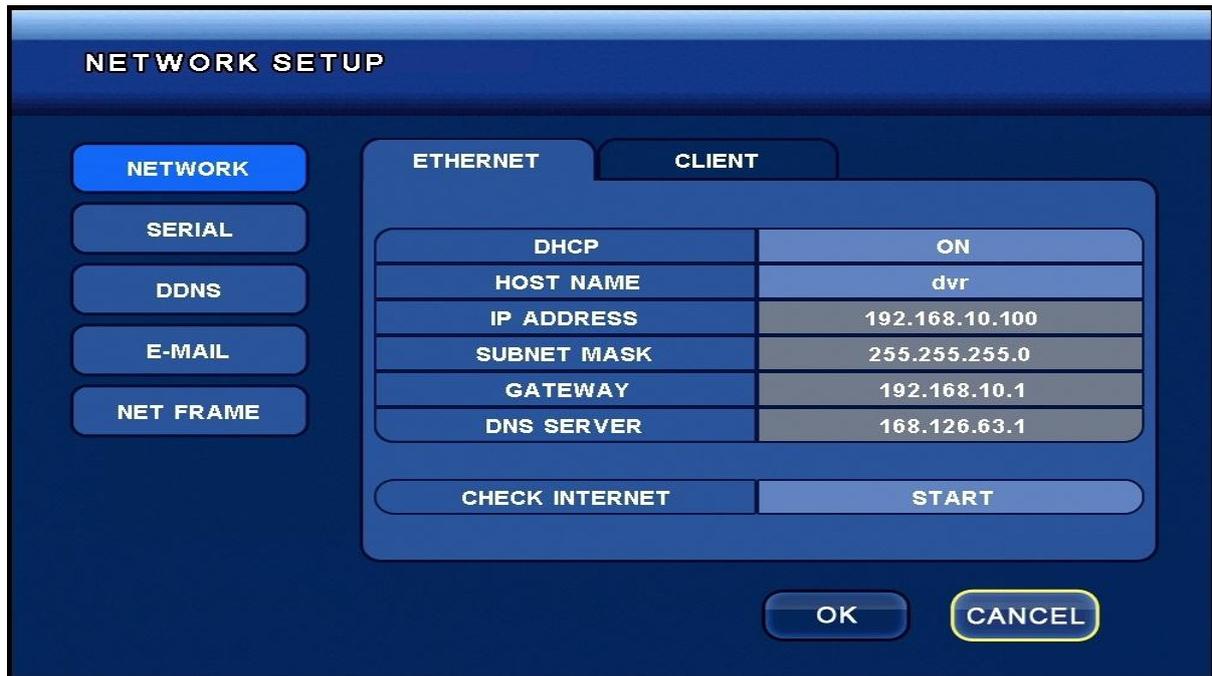
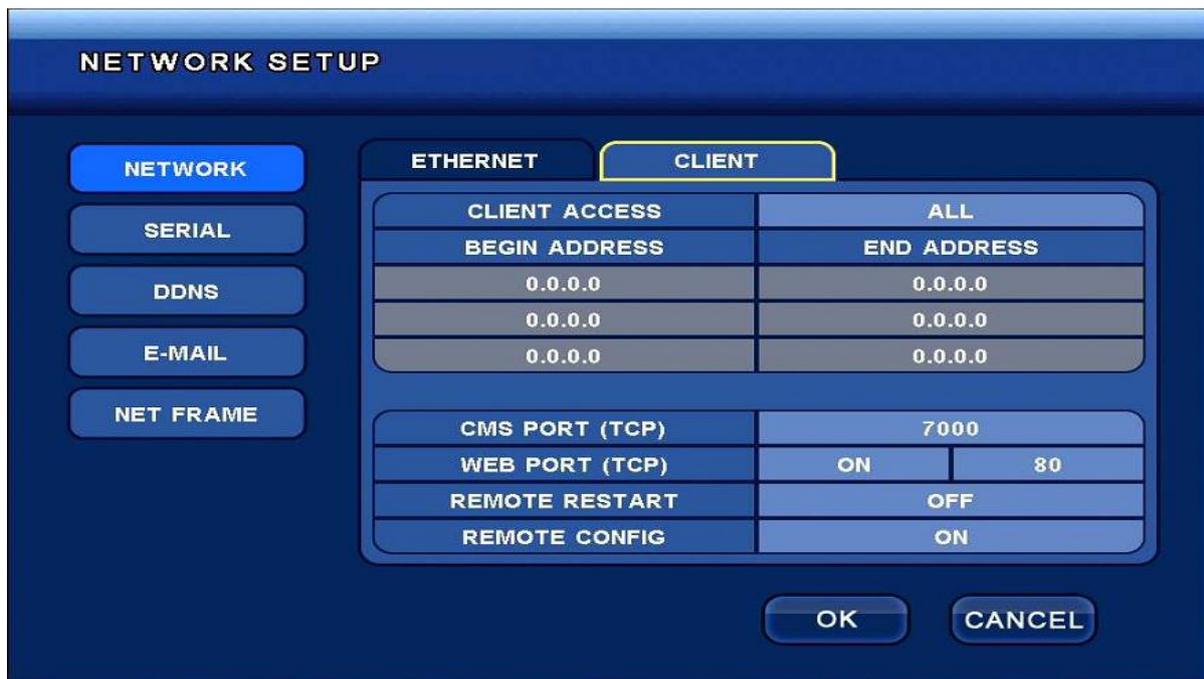


Figure 3.6.1-1 Network\_Ethernet

[ETHERNET] Setup menu

- DHCP: Select the dynamic or static IP (Off: static IP)
- HOST NAME: Decide the host name at your disposal.
- IP ADDRESS: IP address when the static IP is used
- SUBNET MASK: Subnet mask when the static IP is used
- GATEWAY: Gateway when the static IP is used
- DNS SERVER: DNS server when the static IP is used
- CHECK INTERNET: Check network connection.

(Start it after deciding settings up to the DNS server.)



[CLIENT]: Client setup menu

-CLIENT ACCESS: Set the access to the client address (ALL/RANGE).

ALL: Accessible to all addresses

RANGE: Accessible only to selected IP addresses

-BEGIN ADDRESS: Begin IP address when the RANGE is selected (Not available when ALL is selected)

-END ADDRESS: End IP address when the RANGE is selected (Not available when ALL is selected)

-CMS PORT: RAMS access port number

-WEB PORT: WEB port (When WEB access is used)

-REMOTE RESTART: Enable the remote control to restart the DVR (ON/OFF).

-REMOTE CONFIG: Enable the remote control to view DVR information (ON/OFF).

### 3.6.2 Serial Setup



Figure 3.6.2 Serial

#### [RS-232 INPUT SETUP]

-RS-232 SERIAL TYPE: Control the external controller via RS-232 serial communication.

-MODEL: Select the protocol for the external controller.

(GSC-3000J, HITRON HID2404CEN, HUNT HKB-300, 7323 DKB-06, 05-255, VIDO KB3N, TV+KBD1000, WTX1300, RVT, CK201)

-PORT: Select BAUD RATE/ DATA bit /Parity/ STOP bit.

#### [RS-485 INPUT SETUP]

-RS-485 SERIAL TYPE: Control the external controller via RS-485 serial communication.

-MODEL: Select the protocol for the external controller.

(GSC-3000J, HITRON HID2404CEN, HUNT HKB-300, 7323 DKB-06, 05-255, VIDO KB3N, TV+KBD1000, WTX1300, RVT, CK201)

-PORT: Select BAUD RATE/ DATA bit /Parity/ STOP bit.

### 3.6.3 DDNS Setup

The screenshot shows a 'NETWORK SETUP' window with a sidebar on the left containing buttons for 'NETWORK', 'SERIAL', 'DDNS', 'E-MAIL', and 'NET FRAME'. The 'DDNS' button is highlighted. The main area contains a form with the following fields:

DDNS SERVER	ddnsdvr.com	
HOST NAME	unimocnc.ddnsdvr.com	
USER NAME	unimocnc	
PASSWORD	****	
ROUTER IP	OFF	
STATUS	UNCHECKED	CHECK

At the bottom of the window are 'OK' and 'CANCEL' buttons.

Figure 3.6.3 DDNS

-DDNS SERVER: Set the DDNS server.

(dyndns.com, changeip.com, ddnsdvr.com, ezddns.com, no-ip.com)

-HOST NAME: Visit the DDNS server site, register the host, and then enter the host name.

-USER NAME: Visit the DDNS server site to enter the registered user name.

-PASSWORD: Visit the DDNS server site to enter the registered password.

-ROUTER IP: Use it to send IP information to the DDNS server site (ON/OFF).

(Select ON if the router is used.)

-STATUS: Check network connection.

(Check network connection after saving settings.)

### 3.6.4 E-Mail Setup



Figure 3.6.4 E-Mail

[ADDRESS]: E-mail setup menu.

-SEND MAIL: Decide whether or not to send e-mail (ON/OFF).

-SCHEDULE: Schedule e-mail (ON/OFF).

-E-MAIL ADDRESS: Enter the receiver's e-mail address.

**NETWORK SETUP**

Left sidebar buttons: NETWORK, SERIAL, DDNS, **E-MAIL**, NET FRAME

Top tabs: ADDRESS, **SERVER**

MAIL SERVER	DVR SYSTEM
E-MAIL	email@ddnsdvr.com
PASSWORD	****
SMTP SERVER	ddnsdvr.com
SMTP PORT	25
MAIL TEST	SEND

Bottom buttons: OK, CANCEL

[SERVER]: When the e-mail server is the DVR system

-MAIL SERVER: The DVR system can be the e-mail server.

**NETWORK SETUP**

Left sidebar buttons: NETWORK, SERIAL, DDNS, **E-MAIL**, NET FRAME

Top tabs: ADDRESS, **SERVER**

MAIL SERVER	SMTP SERVER
E-MAIL	email@ddnsdvr.com
PASSWORD	****
SMTP SERVER	ddnsdvr.com
SMTP PORT	587
MAIL TEST	SEND

Bottom buttons: OK, CANCEL

[SERVER]: When the e-mail server is the SMTP system

-MAIL SERVER: SMTP server

-E-MAIL: Enter the user's e-mail address.

- PASSWORD: Enter the user's password.
- SMTP SERVER: Enter the SMTP server address.
- SMTP PORT: Enter the SMTP server port.
- MAIL TEST: Check settings through the mail test.

### 3.6.5 Net Frame Setup



Figure 3.6.5 Net Frame

-FPS: Network transfer FPS for each channel

(1, 2, 3, 4, 5, 6, 7.5, 10, 15, 30 FPS) \* See 5.3 FPS setting of Appendix C

- QUALITY+: Transfer quality for each channel (NORMAL, LOW, HIGH, or HIGHEST)

### 3.7 System Setup Menu



Figure 3.7 System Menu Screen

#### 3.7.1 General Setup

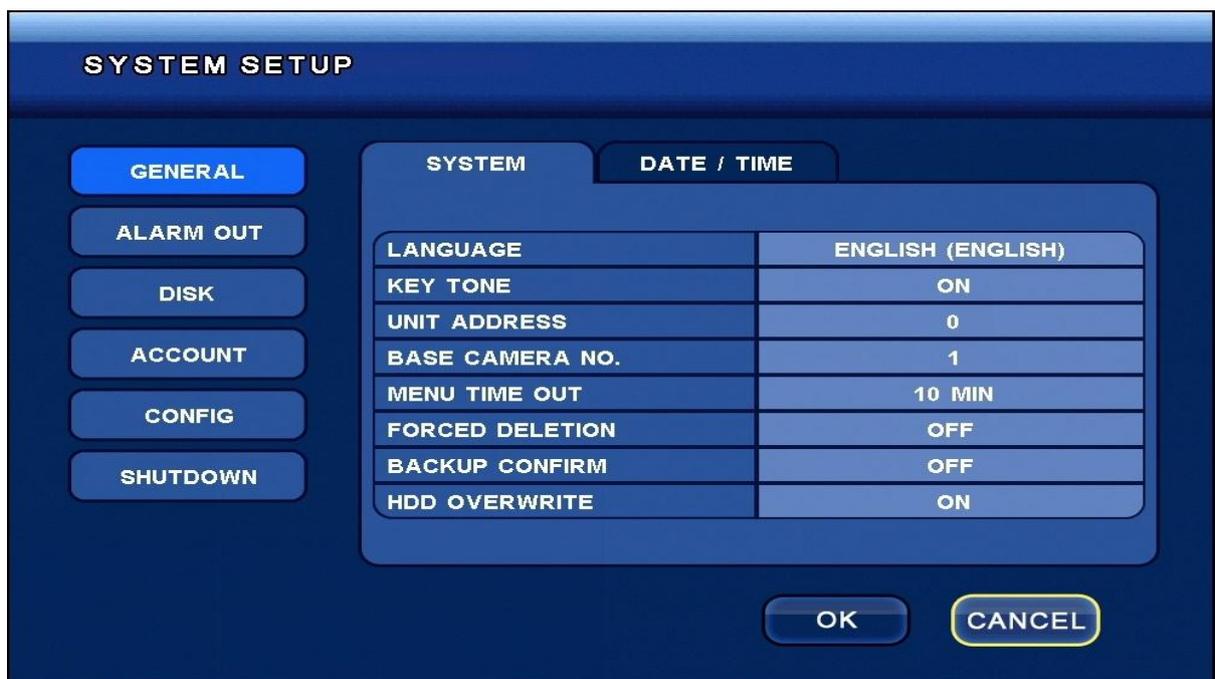


Figure 3.7.1 General

[SYSTEM] General setup menu

-LANGUAGE: Select your language.

(English, Korean, Japanese, Chinese, Russian, French, German, Italian, Taiwanese, Spanish,

Portuguese, Czech, Slovakian, Turkish)

-KEY TONE: Key tone On/Off

-UNIT ADDRESS: DVR ID

-BASE CAMERA NO: Set the base camera number (1 to 84).

-MENU TIME OUT: Menu display time (1 ~ 10 minutes)

-Forced Deletion: Data preservation days (0 ~ 99 days)

EX) If it is set to be 3 days, you cannot play data recorded four days or earlier.

-BACKUP CONFIRM: Backup confirm On/Off

-HDD OVERWRITE: HDD overwrite On/Off. If it is on, when the HDD is full, the oldest data is overwritten for further recording. If it is off, when the HDD becomes full, recording stops.



[DATE/TIME] Date/Time Setup Menu

-DATE FORMAT: Decide the date format (MM/DD/YYYY, DD/MM/YYYY, YYYY/MM/DD).

-TIMEZONE: Decide the time zone of the DVR.

(For the city where the DST is not used, it automatically becomes off.)

-DATE DISPLAY: Date display On/Off

-DATE/TIME: Set the date/time.

-NTP: Decide whether or not to use the NTP.

NTP SERVER	CLIENT
SERVER	time.nuri.net
AUTO SYNC	OFF

SYNC NOW

OK CANCEL

[NTP] When the NTP is used

-NTP SERVER: Decide the server or client.

-SERVER: By default, time.nuri.net is used.

-AUTO SYNC: Daily automatic synchronization

-SYNC NOW: Immediate synchronization

NO.	DATE ( MM / DD )

PREV NEXT ADD DEL

OK CANCEL

-ADD: Add holidays.

-DEL: Delete holidays.

### 3.7.2 Alarm Out Setup



Figure 3.7.2 Alarm Out

[ALARM OUT]: Alarm Out Setup Menu

-SIGNAL+: Set the alarm out on or off for each out port.

-ALARM TEST ON: Set the device connected to Alarm Out for testing.

-ALARM TEST OFF: Clear the device connected to Alarm Out for testing.

### 3.7.3 Disk Setup



Figure 3.7.3 Disk\_Install

[INSTALL]

- TYPE: Type of the installed device
- SIZE: Size of the installed device (N/A: not installed)
- STATUS: Status of the installed device
- FORMAT: Format the installed HDD (All data on the HDD will be deleted.)



[CHECK/USB]

-DISK CHECK: Click on the START button to display the earliest record and the latest record.

-USB RESET: Reset USB connection.

-USB FORMAT: Format the USB memory (All data on the USB memory will be deleted).



[RAID] Configuration Setup

- Configure the HDD RAID (Level 0, Level 1, Level 5, OFF).

\* If the RAID is changed, the device is rebooted for formatting (All data will be lost after formatting.)

3.7.4 Account Setup



Figure 3.7.4 Account

[DVR]: Set up the access for each user.

-ADMIN: Full access to the DVR (Default password: 111111)

-USER: Limited access to DVR (Set by PERM)



[CLIENT]: Set the access of the remote user.

ADMIN: Full access to the DVR (Default password: 111111)

USER: Limited access to DVR (Set by PERM)



WARNING

- You can edit the default user name but cannot delete it.
- If the new ADMIN deletes the default ADMIN, the setup menu cannot be accessible.

### 3.7.5 Config Setup



Figure 3.7.5 Config

- SLOT: Save and read settings on the DVR memory. (Up to four settings can be saved.)
- EXPORT: Export DVR settings on the external device (USB memory, CD).
- IMPORT: Import DVR settings from the external device (USB memory, CD).

### 3.7.6 Shutdown Setup



Figure 3.7.6 Shutdown

-RESTART: Restart the DVR.

-SHUTDOWN: Shut down the DVR.

### 3.8 Backup Setup Menu



Figure 3.8 Backup Menu Screen

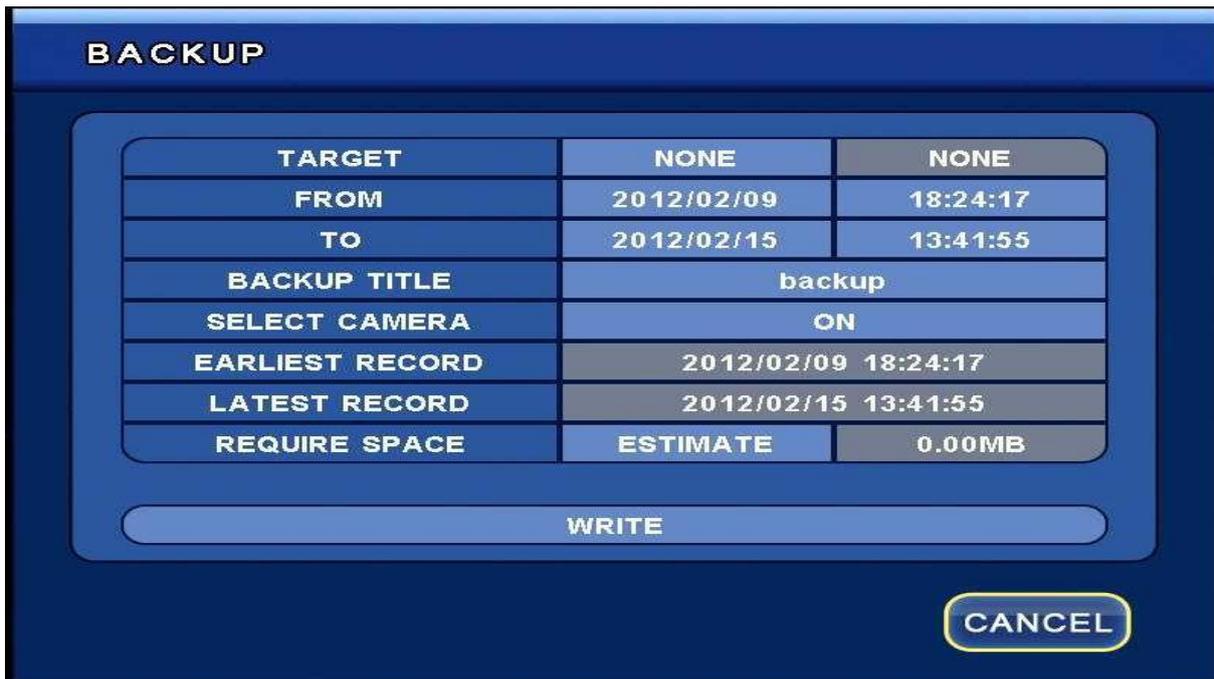


Figure 3.8.1 Backup



-TARGET: Select the target device for backup.

Available devices are the USB memory and DVD-RW.

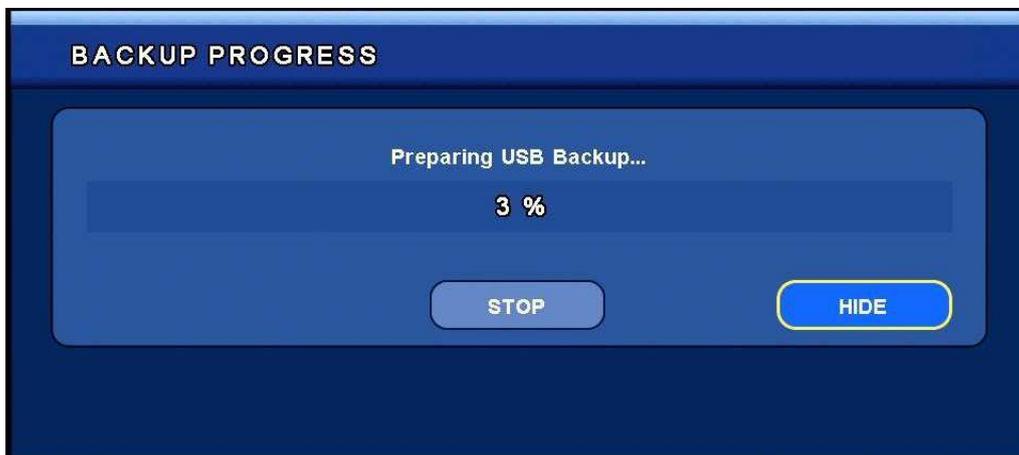
-FROM/TO: Enter the backup time and date.



-BACKUP TITLE: Enter the backup file name.

-SELECT CAMERA: Select the channel for backup.

-REQUIRE SPACE: Calculate the size of backup data.



-WRITE: Start backup.

-HIDE: Press this button to hide the progress bar. When the bar is switched to the small icon on the display, you can do another work while backup is being processed.

### 3.9 System Log Setup Menu



Figure 3.9 System Log Menu Screen



-SYSTEM LOG: Key events in the system

Followings are recorded in the system log.

No.	Log	Remark
1	DVR System Started	
2	DVR System Shutdown	
3	Login Success(ID)	
4	Login Failed(ID)	
5	Logout	
6	Password Changed	
7	Recording Start	
8	Recording Stop	
9	General Setup Changed	
10	Monitor Setup Changed	
11	Resolution Setup Changed	
12	Raid Setup Changed	
13	Record Setup Changed	
14	Schedule Changed	

15	Camera Setup Changed	
16	IpCamera Setup Changed	
17	Spot Setup Changed	
18	PTZ Setup Changed	
19	Motion Setup Changed	
20	Videoloss Setup Changed	
21	Audio Record Setup Changed	
22	Alarm In Setup Changed	
23	Ethernet Setup Changed	
24	DDNS Setup Changed	
25	Serial Setup Changed	
26	Client Setup Changed	
27	E-Mail Setup Changed	
28	E-Mail Server Setup Changed	
29	S/W Auto Upgrade	
30	S/W Manual Upgrade	
31	Time Zone Changed	
32	Time Changed YY/MM/DD Hour:Min:Sec	
33	Playback YY/MM/DD Hour:Min:Sec	
34	Config Upgrade: Time Zone Changed	
35	Config Upgrade: Config Changed	
36	HDD-Num FS Repair Fail!	
37	HDD-Num FS Repair Success!	
38	HDD-Num There was bad sectors! (Bad sector Count)	
39	HDD Format. (Disk Num)	
40	SATA ERROR!!!!	
41	Disk Fault: HDD-Numunmounted due to I/O error	
42	INFO DISK IS FULL:Num	
43	RAID INIT COMPLETED	
44	USB Backup Failed	
45	erase CD	
46	Erase CD complete.	
47	Erase CD fail. (RETURN CODE : Result)	
48	Backup Start Image of Count	
49	Backup Done: Ok or Fail	
50	Protect: Date Time(DST)	
51	Camera Screen Sequence Changed	
52	Video Loss Camera Num	
53	No System Timezone	
54	Invalid System Timezone	
55	Disable WDT ...	
56	Enable WDT !!!	
57	Sync NTP Fail.	
58	Save Conf File	
59	IP Installer Address scanned	
60	IP Installer Address set up	
61	U/I Message Request is failed (message)	
62	E-Mail Queue Full: Discard Previous Mail, Type	
63	Net Info is changed by IP Installer	
64	NET IP Installer failed (No Memory)	
65	NET Invalid IP Host	
66	NET ID(Host)	
67	NET Reject reloading configuration	
68	NET remote config is applied	
69	NET Restart DVR	
70	NET Reject Restart Request	
71	EMail : Address does not respond	
72	Message Failed : Address	
73	EMail Failed: Invalid Addr Domain	
74	EMail Failed: Check Domain or DNS	
75	Load Slot NumConfig File	
76	Weak Camera Signal Num	

### 3.10 Info Setup Menu



Figure 3.10 Info Menu Screen

#### 3.10.1 Disk Setup



Figure 3.10.1 Disk

-DISK: Disk usage information

[HDD INFORMATION]

- HDD environment such as HDD size, bad sectors, temperature, availability

**HDD INFORMATION**

NO.	SIZE	BAD SECTOR	TEMP.	S.M.A.R.T
HDD1	2.00TB	2 / 1849	42 C	GOOD
HDD2	2.00TB	1 / 1849	44 C	GOOD
HDD3	-	-	-	-
HDD4	-	-	-	-
HDD5	-	-	-	-
HDD6	-	-	-	-
HDD7	-	-	-	-
HDD8	-	-	-	-
HDD9	-	-	-	-
HDD10	-	-	-	-

HDD1

**CANCEL**

### 3.10.2 Record Setup

**SYSTEM INFO**

DISK

**RECORD**

AUDIO

CAMERA

VERSION

UPGRADE

SCHEDULE REC 1

CAM	TIME	EVENT
1	7.5, HIGHEST	7.5, HIGHEST
2	7.5, HIGHEST	7.5, HIGHEST
3	7.5, HIGHEST	7.5, HIGHEST
4	7.5, HIGHEST	7.5, HIGHEST
5	7.5, HIGHEST	7.5, HIGHEST
6	7.5, HIGHEST	7.5, HIGHEST

**CANCEL**

Figure 3.10.2 Record

-RECORD: Status of the current record

### 3.10.3 Audio Setup



Figure 3.10.3 Audio Setup

-AUDIO: Status of the current audio

### 3.10.4 Camera Setup



Figure 3.10.4 Camera Setup

-CAMERA: Camera input source (HD)

### 3.10.5 Version Setup



Figure 3.10.5 Version Setup

-VERSION: Current version, video format and MAC address

### 3.10.6 Upgrade Setup



Figure 3.10.6 Upgrade Setup

- UPGRADE: Select the device containing S/W for DVR S/W upgrade, and then press START. \* Note it is normal that the DVR restarts after S/W upgrade.

### 3.11 Search Setup Menu



Figure 3.11 Search Menu Screen

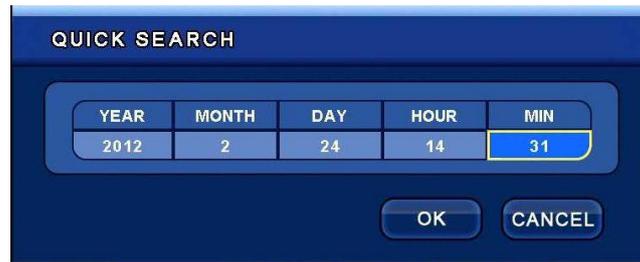


Press the Search button on the main screen, DVR front or remote control to display the following screen.

SEARCH		DVR			
TARGET	HDD	NO	DEVICE	MODEL	SPACE
TIME		1	HDD	-	465GB
CALENDAR		2	DVD-RW	HL-DT-ST	
EVENT		3	USB	UFDBM	1GB
OVERLAPPED LIST					
CANCEL		CANCEL		CANCEL	

-HDD: HDD to be searched

### 3.11.1 Time Search Setup



-QUICK SEARCH: Select TIME to enter YYYY/MM/HH for quick search.

### 3.11.2 Calendar Search Setup



-CALENDAR: Dates with records are displayed. Select the date to display record data.



Select the hour/minute to play desired information.

### 3.11.3 Event Search Setup

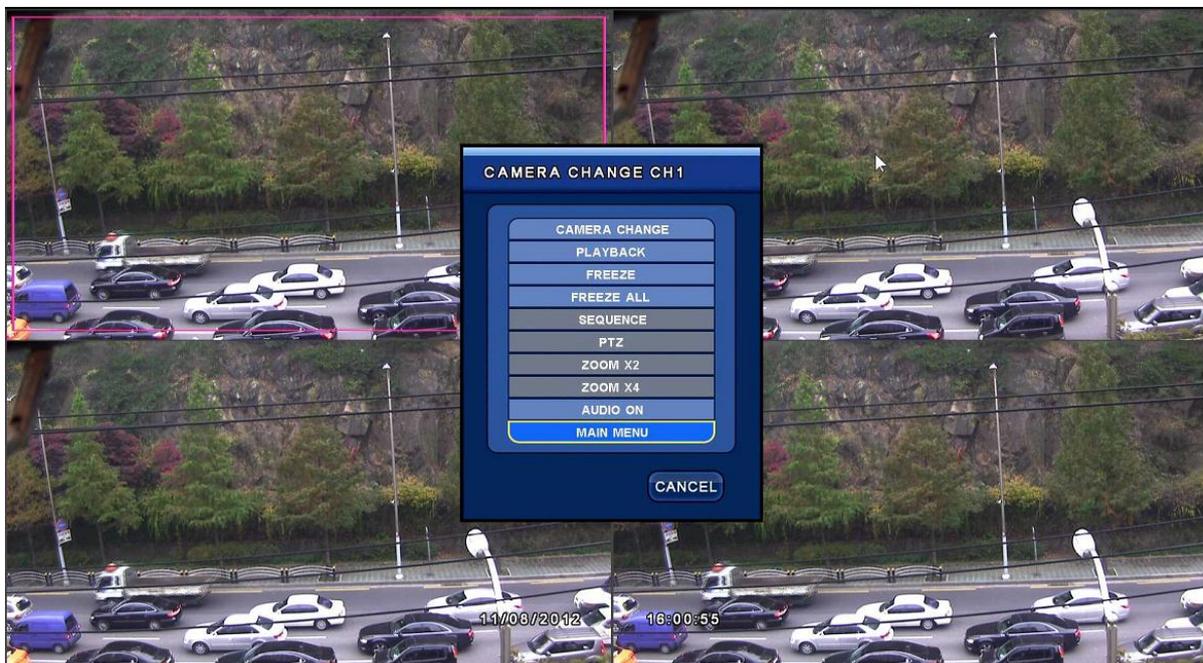


-EVENT SEARCH: Select EVENT to search based on MOTION/ALARM IN/VIDEO LOSS. Also, you can play the searched event.

### 3.11.4 Overlapped Search Setup

-OVERLAPPED LIST: Search and play the overlapped data overtime.

## 3.12 Camera Change Setup Menu



-CAMERA CHANGE: Switch the screen on the desired channel.

Place the mouse pointer over the channel and click on the right key to display the camera change

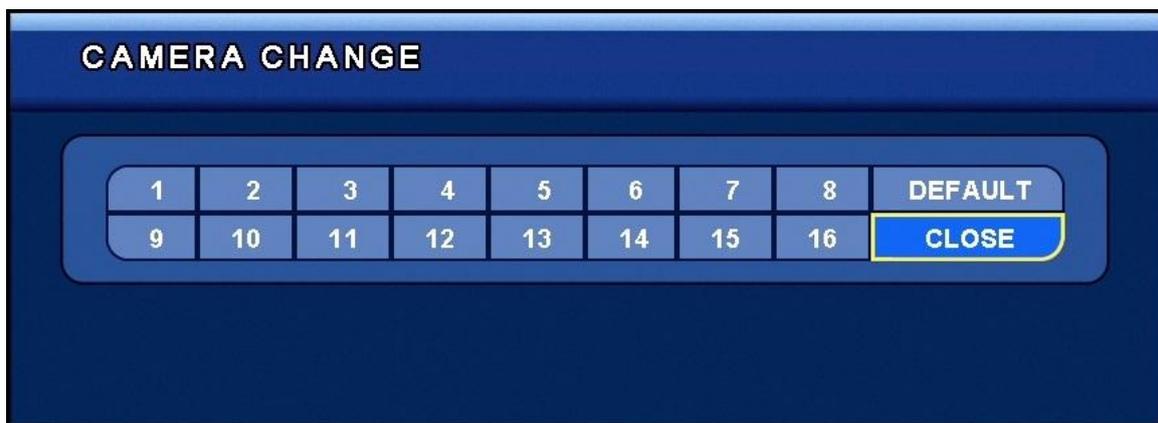
menu window.

Use the front key or remote control key to select the channel and press OK to display the camera change menu window.

### 3.12.1 Camera Change Setup

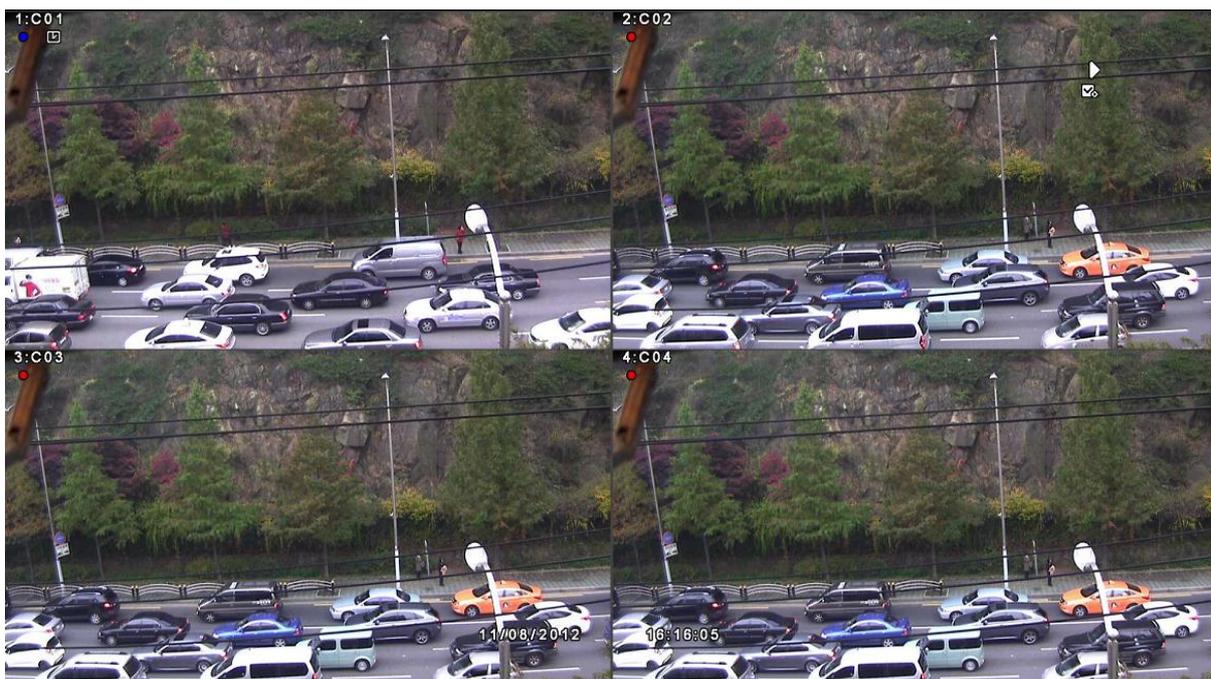
-CAMERA CHANGE: Change the camera on the selected channel.

(Press DEFAULT to return to the default condition.)



### 3.12.2 Playback Setup

-PLAYBACK: Play the selected channel. The selected channel is played from the set time. Other channels provide the live image.

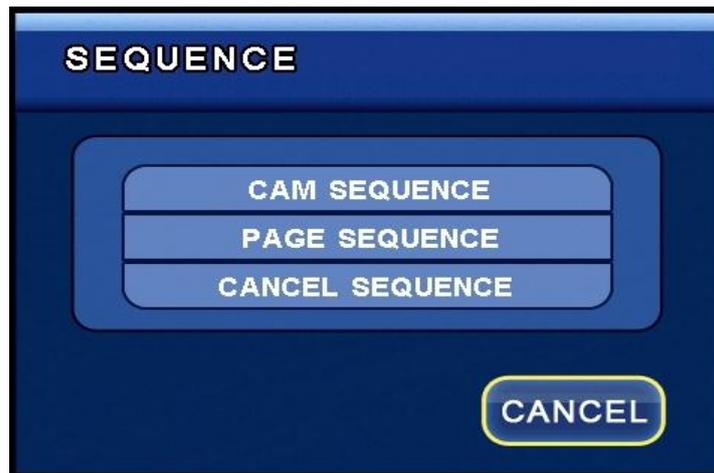


### 3.12.3 Freeze Setup

-FREEZE: Freeze the selected channel.

-FREEZE ALL: Freeze all channels.

### 3.12.4 Sequence Setup



- SEQUENCE: Sequence according to CAMERA\_SEQUENCE.
- CAM SEQUENCE: Switch cameras according to CAMERA\_SEQUENCE.
- PAGE SEQUENCE: Switch pages according to PAGE\_SEQUENCE.

### 3.12.5 PTZ Setup



-PTZ: PTZ On/Off for the channel according to CAMERA\_PTZ setups.

(Place the mouse pointer over the desired channel and press the PTZ button to enable PTZ.)

- After enabling PTZ, use the direction key on the front or mouse to move the camera. Press the menu button to control other functions.

-Z+, Z-: Zoom In/Out

-F+, F-: Focus In/Out

-I+, I-: Iris In/Out

-EXIT: Exit PTZ control.

-CANECCEL: Exit the PTZ control window.

-PTZ MENU: Control additional functions of the PTZ camera.



- SPEED SETUP: Control camera speed (1~8 steps).
- PRESET SETUP: Preset up to 50 pan/tilt locations to move the camera.
- PRESET TOUR: Make the preset list. Enable it to perform PRESET TOUR.
- PATTERN SETUP: Set up desired patterns.
- PATTERN TOUR: Move the camera according to the user pattern.
- OSD MENU: OSD menu On/Off

### 3.12.6 ZOOM \*2, \*4 Setup



-ZOOM \* 2, \* 4: Magnify the image.



### 3.12.7 AUDIO ON/OFF

-AUDIO ON: Audio On/Off for the selected channel

## 3.13 Playback

### 3.13.1 Playback of Records

- Play the live video according to predefined conditions or search to play the live video.

### 3.13.2 How to Play

- Press the search button, select the search type, and then select the video to play it. At this point, if the video is recorded with audio, its audio can be played, too.



### 3.13.3 Operation While Playing

#### 3.13.3\_1 Stop While Playing

- While the video is being played, press the EXIT button on the remote control or DVR front to stop the video and return to the live screen.

#### 3.13.3\_2 Pause While Playing

- While the video is being played, press the PAUSE button on the remote control or DVR front to pause the video. At this point, press the PAUSE button again to return to the previous status.

#### 3.13.3\_3 Play Speed Control

- Available are slow forward playing in three steps, normal forward playing, fast forward playing in four steps, normal reverse playing and fast reverse playing in four steps. Press the RIGHT button on the remote control or DVR front to increase play speed and press the LEFT button on the remote control or DVR front to decrease play speed.

- To play the video slowly with the mouse, while the video is being played, press the PAUSE

button and press the button past to change play speed (1/2, 1/4, 1/8 x speed).

#### **3.13.3\_4 Play Direction Change**

- Available are forward and reverse play directions. While the video is being forward-played, press the R-PLAY button to reverse-play the video at normal speed. While the video is being reverse-played, press the PLAY button to forward-play the video at normal speed.

#### **3.13.3\_5 Play Channel Selection**

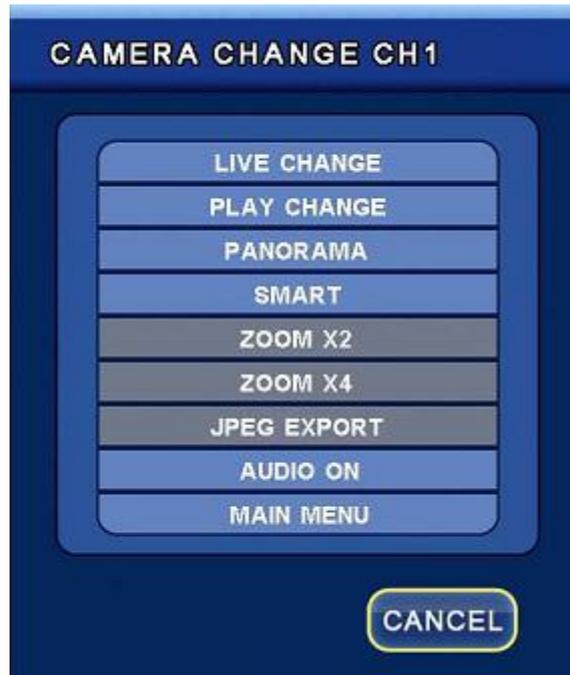
- While the video is being played, select a different channel. Use the remote control to select a different channel. However, for channel 1, press and hold 1 for three seconds or press OK. Use the channel button on the front to change channels easily.

#### **3.13.3\_6 Repeated Play**

- While the video is being played, press the SEQ button for repeated play. Or use the mouse to select A-B for repeated play.
- While the video is being played, press the SEQ button to display "S hour/minute/second." Press the SEQ button again to display "E hour/minute/second" to start repeated play.
- To finish repeated play, press the EXIT button or press the X button with the mouse.

#### **3.13.4 Other Functions While Playing**

- While the video is being played, select a channel, press the right button of the mouse or press the OK button on the DVR front to select a channel and the press the OK button again to display the camera change menu as follows.



#### **3.13.4\_1 Live Change**

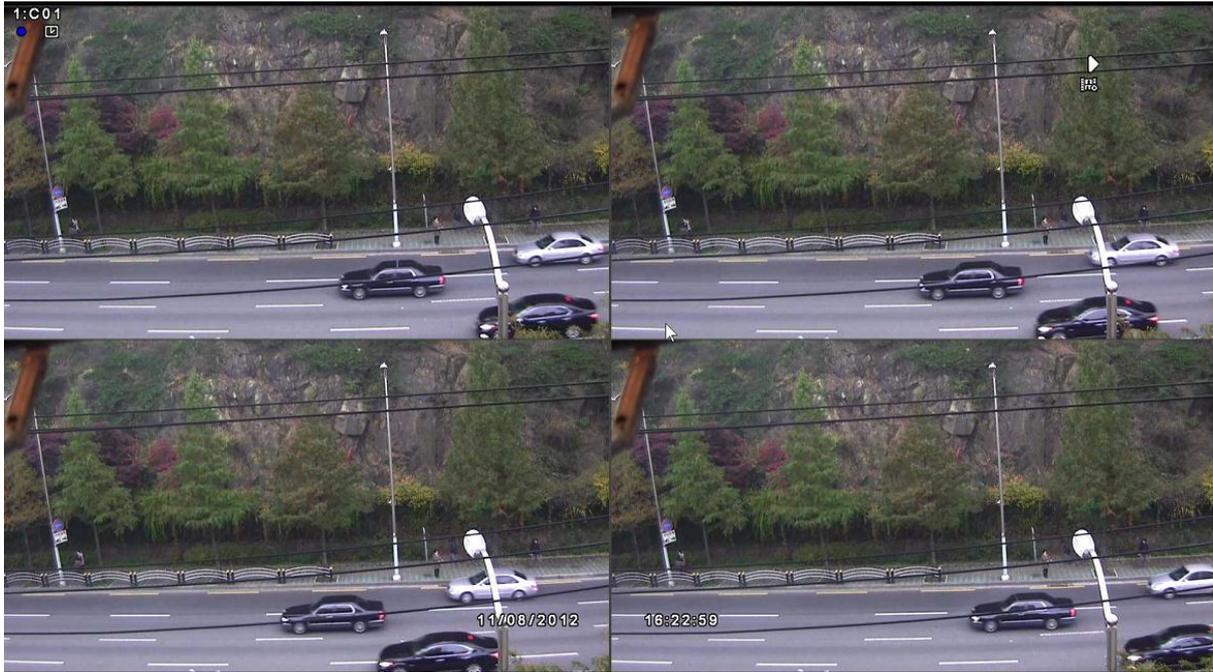
- Change the channel in the live mode. Press the LIVE CHANGE button to display the channel selection window. Select the desired channel to play it in the live mode.

#### **3.13.4\_2 PLAY CHANGE**

- Change the channel in the play mode. Press the PLAY CHANGE button to display the channel selection window. Select the desired channel to play it in the live mode.

#### **3.13.4\_3 PANORAMA**

- Change the channel to the panorama mode. Press the PANORAMA button to switch the display to four-screen panorama mode and play the video for each screen.



#### 3.13.4\_4 Smart



- Change the channel to the smart mode. Press the SMART button to play the video from where an event occurred without other unnecessary steps.

#### 3.13.4\_5 ZOOM \*2, \*4 Setup

- Zoom in the current channel at X2 or X4.

### 3.13.4\_6 JPEG Export

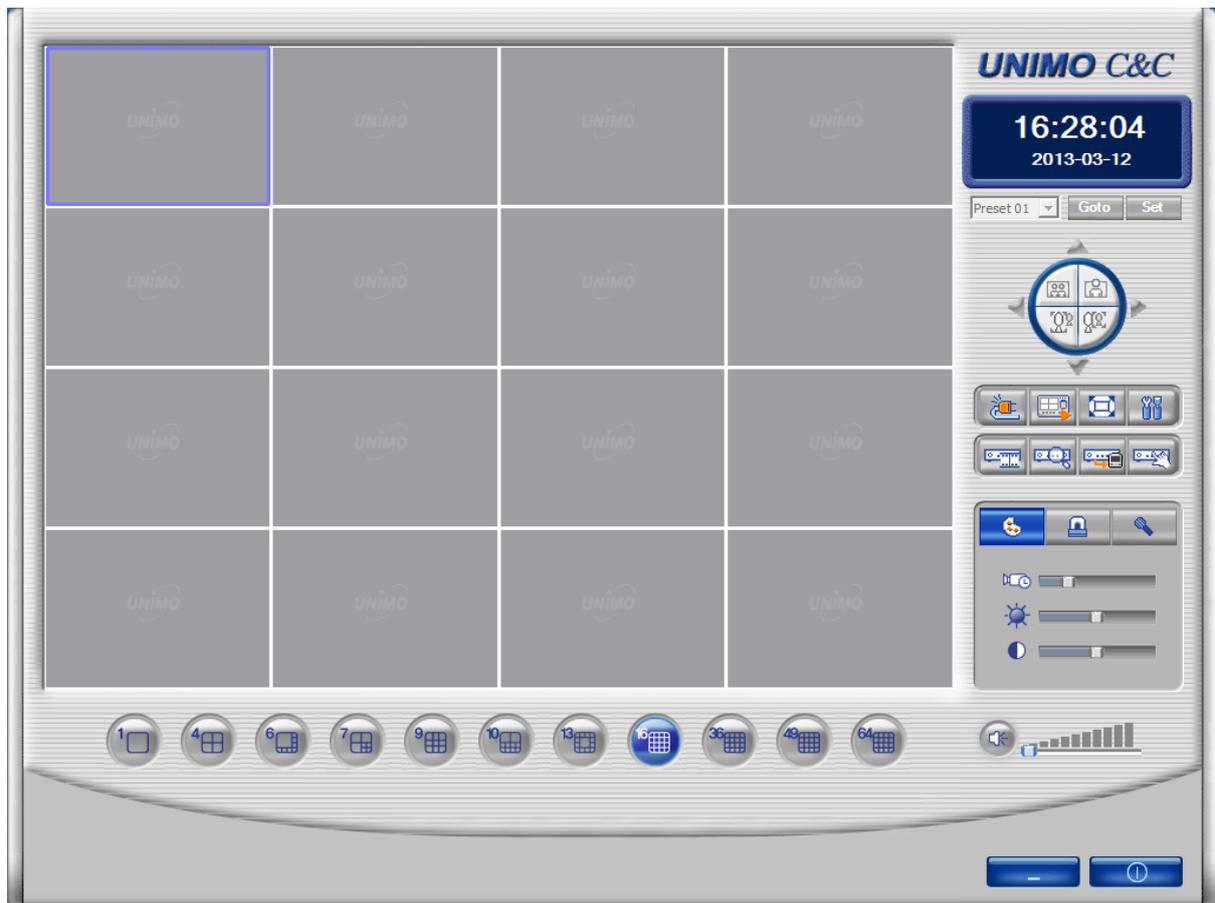
- Export the current channel to the storage as a jpeg image.

### 3.13.4\_7 Audio ON/OFF

- While playing the file linked with audio, select a channel and click on the right button of the mouse to display the audio menu. Turn audio on, click on Play to play audio. Or, press the OK button on the DVR front to select a channel. Press the OK button again to display the audio menu. Turn audio on, click on Play to play audio.

## Chapter 4. Introduction to PC Client

### 4.1 RAMS PRO

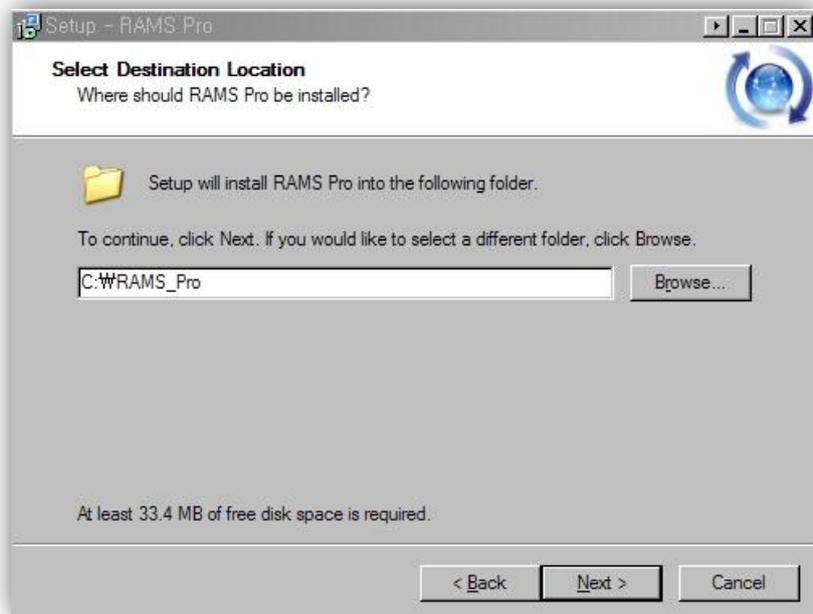


RAMS PRO is total DVR control software and supports up to 64 channels for real-time video monitoring, DVR system setting, DVR backup, and AVI convert.

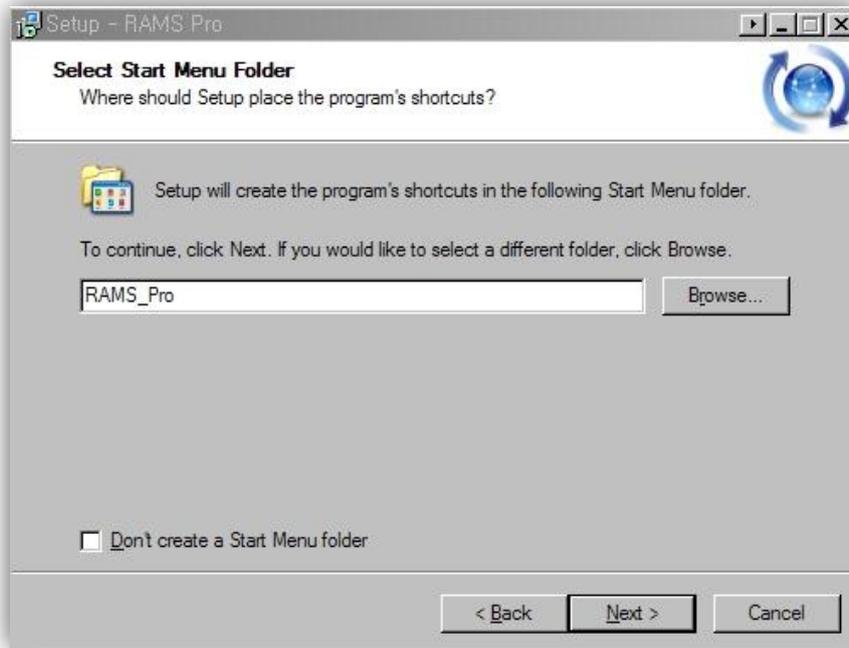
### 4.1.1 RAMS PRO Installation



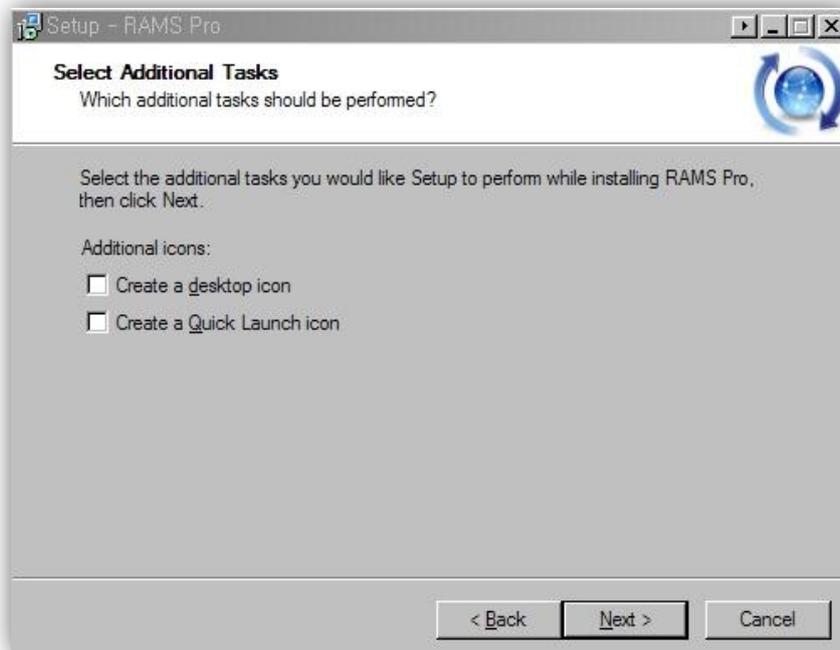
- Run RAMS pro.exe and press Next to start installation.



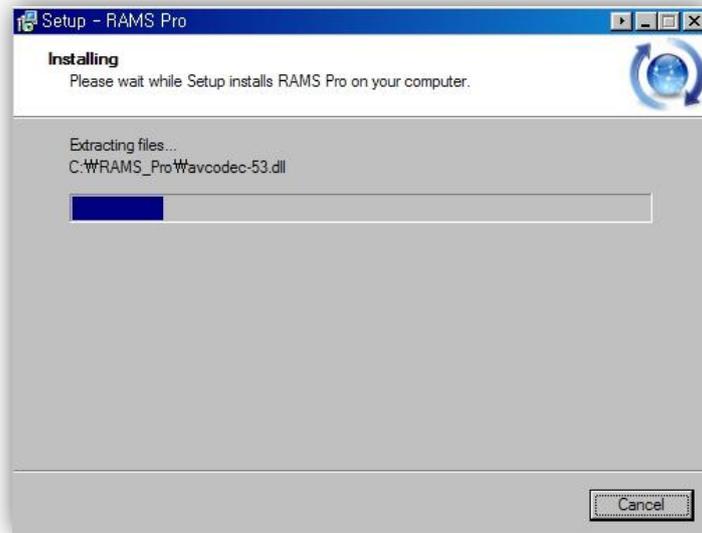
- Set the installation path or new folder name. The default folder is C:\WRAMS\_Pro. Press Next to move on to the next step.



The shortcut is created in the Start Menu Folder of Windows. If you don't want the shortcut, check "Don't create a Start Menu folder" and press Next to move on to the next step.

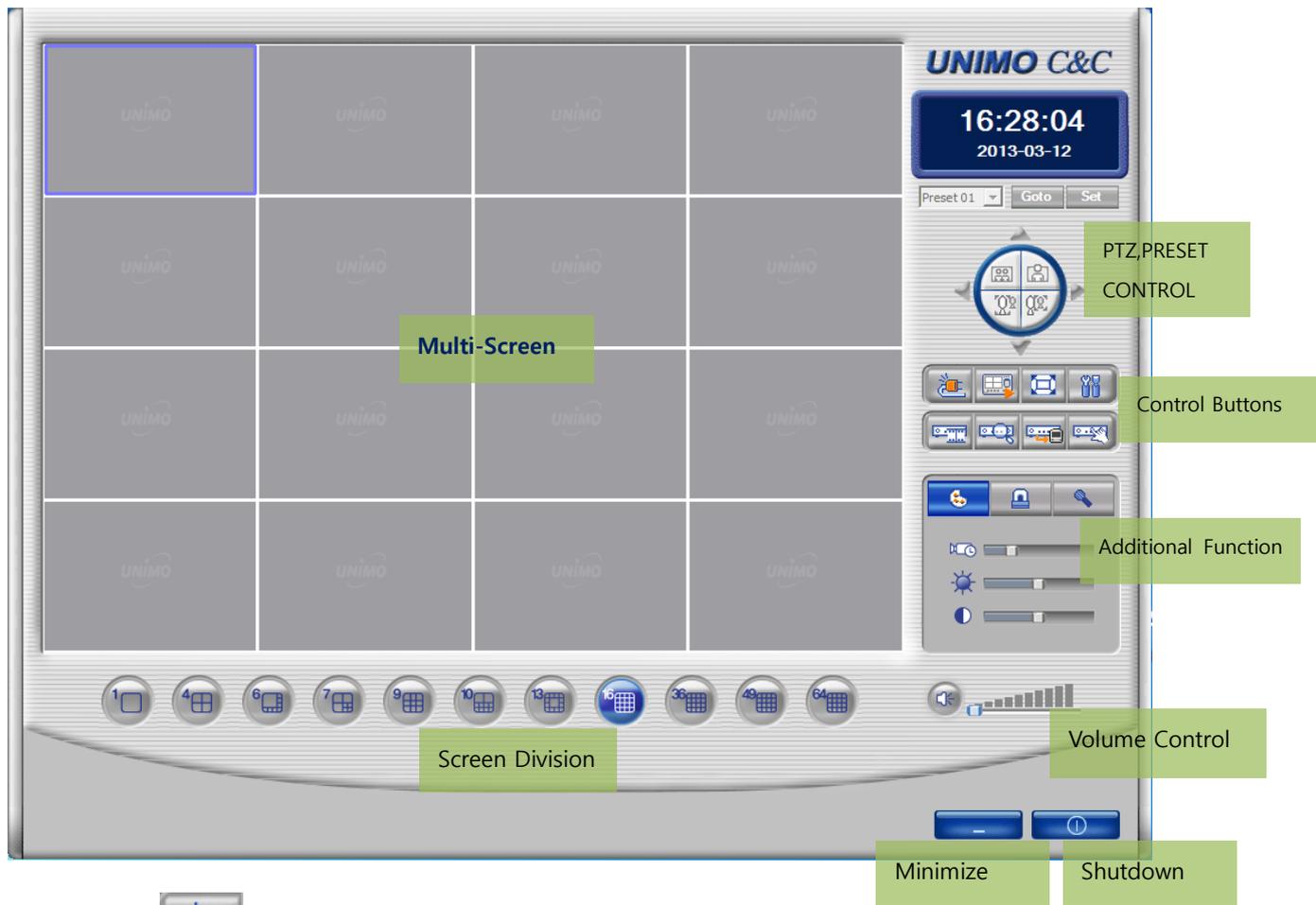


Check Create a desktop icon or Create a quick Launch icon or both, and then press Next to move on to the next step.



After completing installation, select a program to launch or press Finish to finish installation.

### 4.1.2 RAMS PRO Access



- CONNECT 



- DVR ADD

Press the connect icon to open the DVR list, and then click on Base Group. Enter the name, IP, port, user ID and password of the DVR that you want to access, and then press the DVR ADD button to add the DVR to the DVR list.

	Default Values of the DVR
<b>ID</b>	<b>ADMIN</b>
<b>PW</b>	<b>111111</b>
<b>PORT</b>	<b>7000</b>

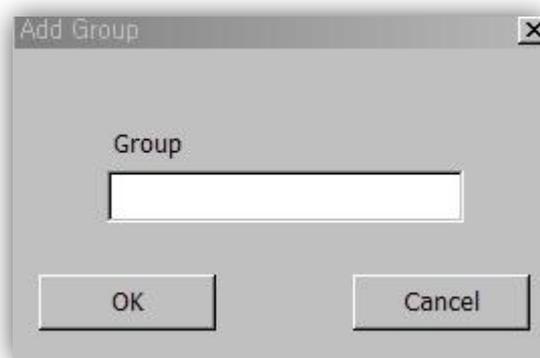
#### - DVR MODIFY

Select the name of the DVR on the access list to check its name, IP, port, user ID and password. Change the desired item, and then press DVR MODIFY to finish modification.

#### - DVR DELETE

Select the name of the DVR on the access list to check its name, IP, port, user ID and password. Press DVR DELETE to delete such information from the access list.

#### - GROUP ADD



To add a new group, press the GROUP ADD button to open the ADD GROUP window. Enter the name of the new group in the field, and then press OK to add a new group to the list.

#### - GROUP MODIFY

Select a group on the list, and then press the GROUP MODIFY button to open the MODIFY GROUP window. Enter the name of the group in the field, and then press OK to change its name.



#### - GROUP DELETE

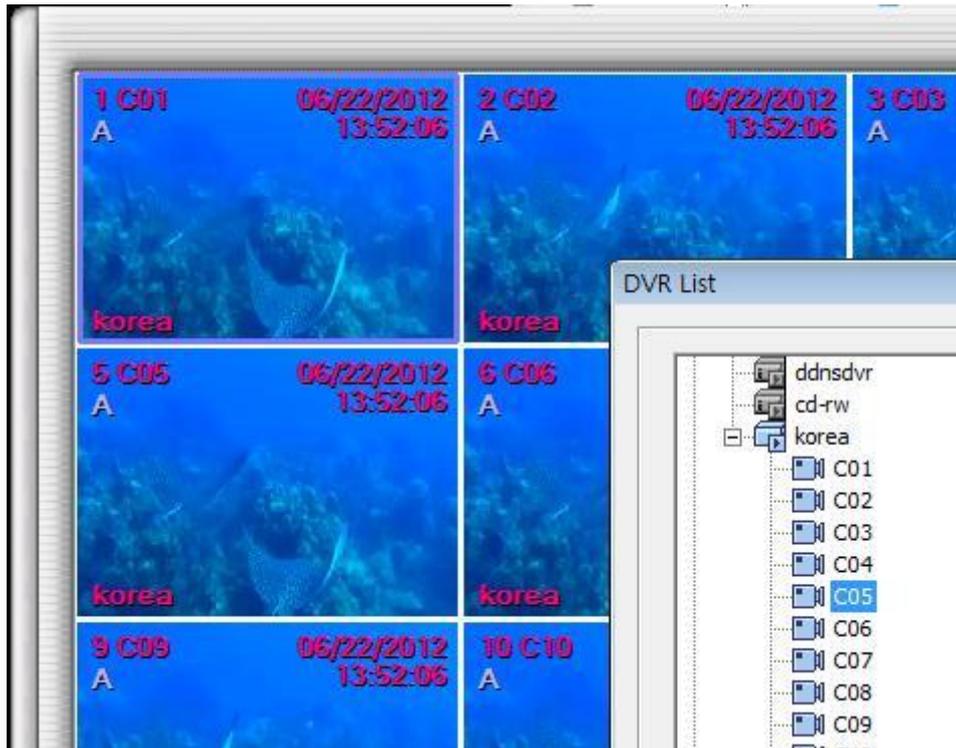
Select a group on the list, and then press the GROUP DELETE button to delete the selected group.

#### - DVR CONNECT

Enter DVR access information, and then press the CONNECT button. If access is successful, the below window will appear. Press OK to view the DVR image on the multi-screen.



#### - Selection of Some Channels



When the DVR is connected, its icon turns blue. Press the + button to show all channels of the connected DVR. Drag and drop the desired channel into the screen to watch it.

- Group Connect



Right-click on the desired group on the DVR list to display GROUP CONNECT and GROUP DISCONNECT. Select GROUP CONNECT to connect up to 64 channels to the selected DVR.

### 4.1.3 Screen Division Control



The multi-screen can be divided up to 64 channels.

### 4.1.4 Minimize



Minimize the program to hide it from the screen. To return it to its original size, select the program in the taskbar.

### 4.1.5 Shutdown

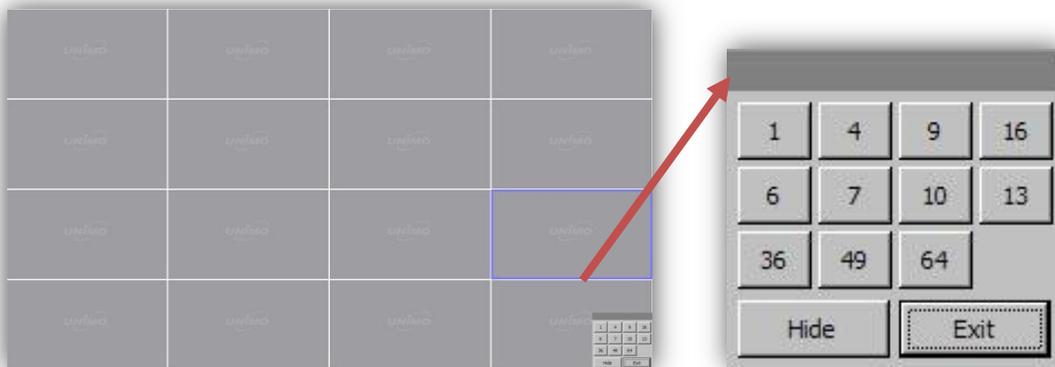


Press this button to shut down the program.

### 4.1.6 FULL SCREEN



Select this icon to see the DVR image in the full screen.



In the full screen, it can be divided into 1, 4, 9, 16, 6, 7, 10, 10, 36, 49 or 64 channels.

- HIDE: Hide the controller (control mode).

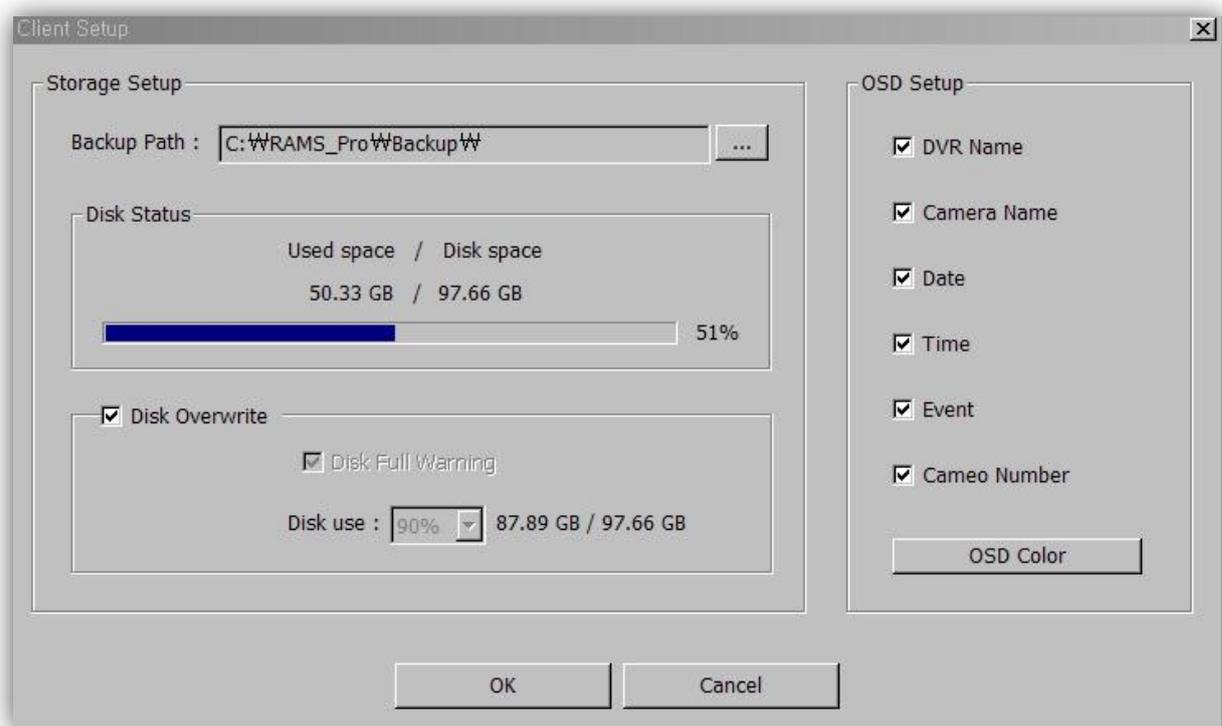
(Right-click on the icon to exit the hide mode.)

- EXIT: Exit the full screen mode.

#### 4.1.7 SETUP



Click the SETUP button to display the CLIENT SETUP window as below.



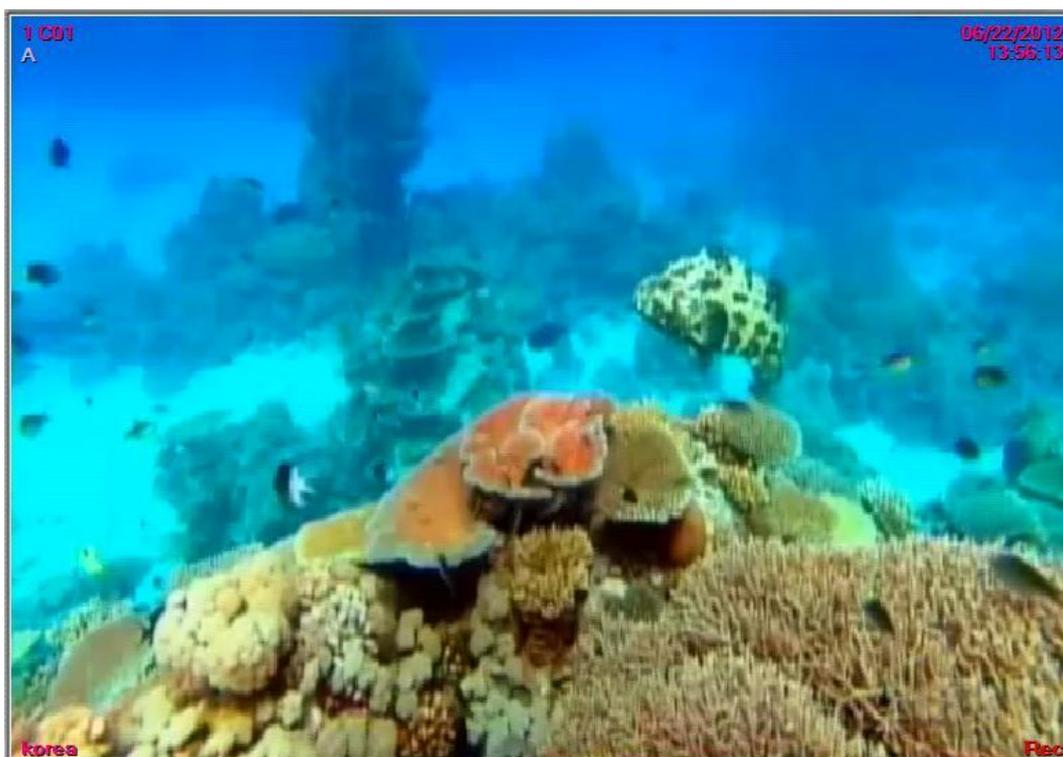
- STOGARE SETUP: Check information of the current PC.

- BACKUP PATH: Designate the backup folder according to the client's DIRECT, EVENT, LIVE and SCHEDULE.

- DISK STATUS: HDD use of the current PC

- If DISK OVERWRITE is unchecked, check Disk Full Warning to warn the user when the HDD use reaches the amount designated in the Disk Use field.

#### 4.1.8 RECORD



If you want to record the image separately from DVR recording, select the desired channel, and then click on the RECORD button. Then, the selected image is being recorded on the designated backup path.

#### 4.1.9 DVR PLAYER

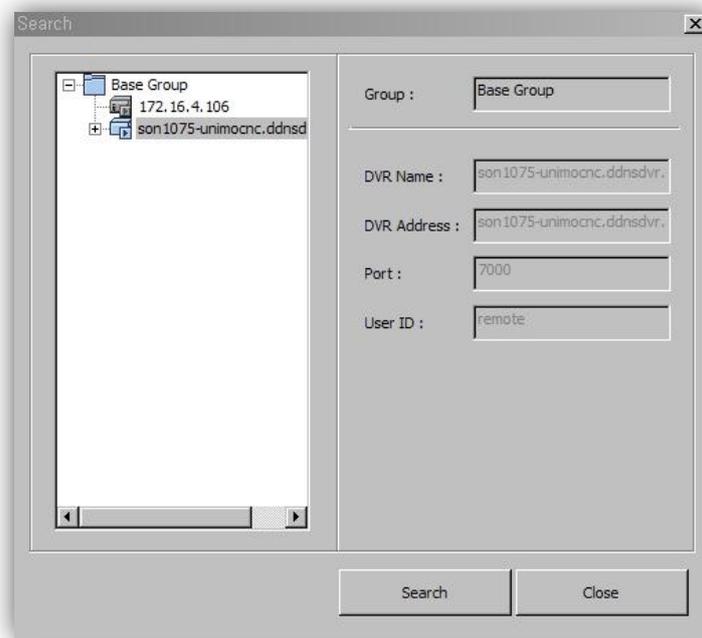


Click on this button to run DVR PLAYER and play the recorded video separately from RAMS PRO.

#### 4.1.10 SEARCH



Previous recordings on the DVR can be searched from a remote location. Click on this icon to display the search window.



Select the desired the DVR on the access list and press the Search button to search data on the PC based on the selected date.



#### 4.1.11 Remote Backup



- Click on this icon to save DVR recordings on the PC.
- Select a date to display data. Select the DVR, select the beginning and ending points, select the channel, and press Start to back up data.

Remote Backup

Select DVR : 172.16.4.116

2012 - 03

1 2 3  
4 5 6 7 8 9 10  
11 12 13 14 15 16 17  
18 19 20 21 22 23 24  
25 26 27 28 29 30 31

CAM 01  
CAM 02  
CAM 03  
CAM 04  
CAM 05  
CAM 06  
CAM 07  
CAM 08  
CAM 09  
CAM 10  
CAM 11  
CAM 12  
CAM 13  
CAM 14  
CAM 15  
CAM 16

00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

10:27 ~ 11:27 Require Space

Channel	Date	Start Time	Finish Time	Estimate Size	Percent	Status
<input checked="" type="checkbox"/> 1	03/09/2012	10:27:00	11:27:00	700.83 MB	45.0 %	downloading
<input checked="" type="checkbox"/> 2	03/09/2012	10:27:00	11:27:00	220.96 MB	0 %	wait
<input checked="" type="checkbox"/> 3	03/09/2012	10:27:00	11:27:00	436.10 MB	0 %	wait
<input type="checkbox"/> 4	03/09/2012	10:27:00	11:27:00	437.04 MB	0 %	-
<input type="checkbox"/> 5	03/09/2012	10:27:00	11:27:00	439.91 MB	0 %	-
<input type="checkbox"/> 6	03/09/2012	10:27:00	11:27:00	440.99 MB	0 %	-
<input type="checkbox"/> 7	03/09/2012	10:27:00	11:27:00	441.21 MB	0 %	-
<input type="checkbox"/> 8	03/09/2012	10:27:00	11:27:00	442.83 MB	0 %	-
<input type="checkbox"/> 9	03/09/2012	10:27:00	11:27:00	441.06 MB	0 %	-
<input type="checkbox"/> 10	03/09/2012	10:27:00	11:27:00	441.11 MB	0 %	-
<input type="checkbox"/> 11	03/09/2012	10:27:00	11:27:00	441.80 MB	0 %	-
<input type="checkbox"/> 12	03/09/2012	10:27:00	11:27:00	442.02 MB	0 %	-
<input type="checkbox"/> 13	03/09/2012	10:27:00	11:27:00	442.59 MB	0 %	-
<input type="checkbox"/> 14	03/09/2012	10:27:00	11:27:00	441.90 MB	0 %	-
<input type="checkbox"/> 15	03/09/2012	10:27:00	11:27:00	442.58 MB	0 %	-
<input type="checkbox"/> 16	03/09/2012	10:27:00	11:27:00	63.04 MB	0 %	-

Backup Cancel

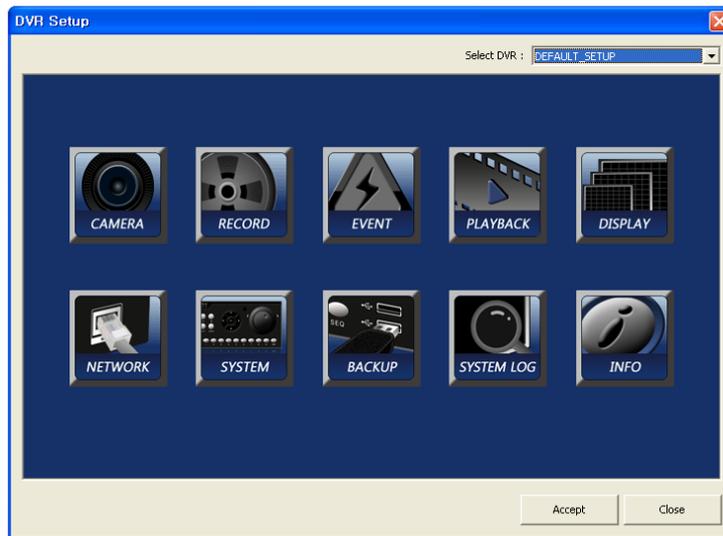
Click on the below icon to play backup data via Uniplayer\_pro (See 4.2).



#### 4.1.12 Remote Setup



- Click on this icon to change DVR parameters via RAMS PRO from a remote location. All the menus are the same of those of the DVR. Set up in the same way as the DVR.



- Click on the DVR Setup icon, click on Select DVR, and then select the DVR to control it.

#### 4.1.13 Adjust Control



From the top

- Frame Rate: Control the FPS of the video being played on the multi-screen.
- Brightness: Control the brightness of the video being played on the multi-screen.
- Contrast: Control the contrast of the video being played on the multi-screen.

#### 4.1.14 Alarm Control



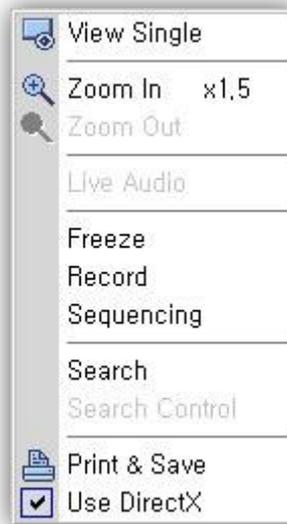
Control the siren or other alarm devices connected to the DVR.

#### 4.1.15 Audio Control



Deliver sound to the DVR speaker via the microphone connected to the PC.

#### 4.1.16 Mouse Menu



Click the right button of the mouse over the multi-screen to control the current video.

-VIEW SINGLE - Switch the channel into the single view mode.

-ZOOM IN x 1.5 - Zoom in the current video at X1.5.

-ZOOM OUT - Zoom out the video to the original size.

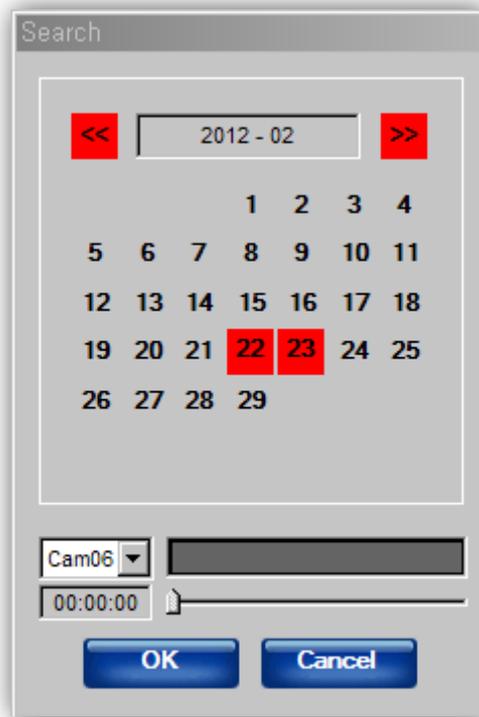
-LIVE AUDIO - Sound from the selected channel

-FREEZE - Freeze the current video.

-RECORD - Record the current video on the PC separately from the DVR.

-SEQUENCING - Switch channels on the divided screen in the designated interval.

-SEARCH - Use it to play data only for the selected channel.



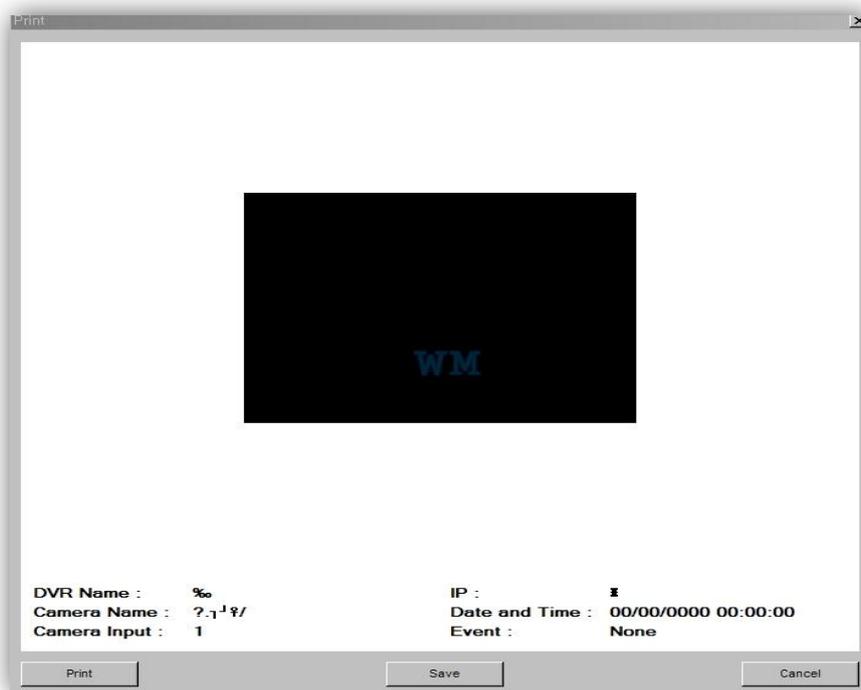
When the calendar appears, the date containing data is highlighted in red. Select data, and then press OK.

-Search Control



From the selected time, available are reverse play, pause, play, fast reverse, fast forward, move to a previous frame, move to a next frame, move to the first data and move to the latest data.

-Print & Save



Save or print selected or all channels.



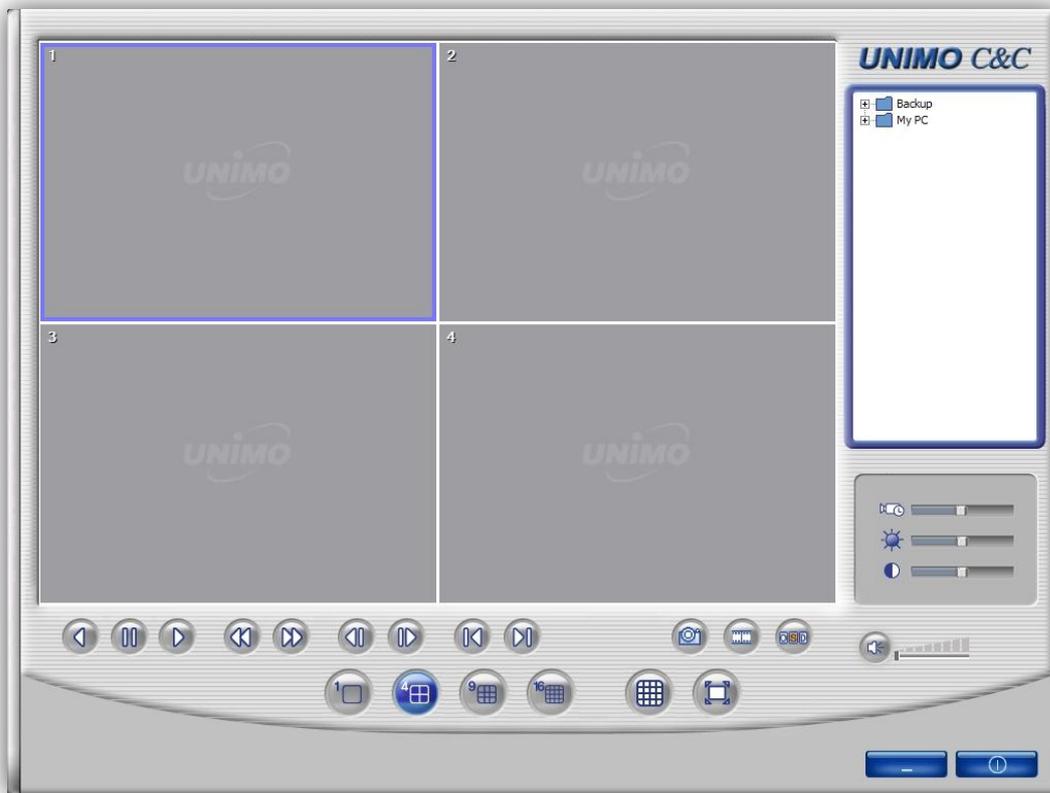
#### 4.1.17 PTZ Control

Click on the arrow to move the camera connected to the DVR.



ZOOM IN   ZOOM OUT   FOCUS IN   FOCUS OUT

## 4.2 UniPlayer\_Pro



UNIPLAYER Pro is used to play the recorded video and operational during backup from DVR to USB/CD/DVD. Except for following functions, UNIPLAYER Pro has the same function as RAMS PRO.



: PRINT & SAVE – Capture, save and print the current or all divided video.



: Convert backup files into AVI files.





: Select the OSD output.

## 4.3 Web Client

### 4.3.1 Active-X Control Download

- Enter the DVR address into the address field of the IE. If the following message appears when the DVR is connected, press "설치". Then, Active-X begins to install. (If you press "설치 안 함", you cannot run the program.)



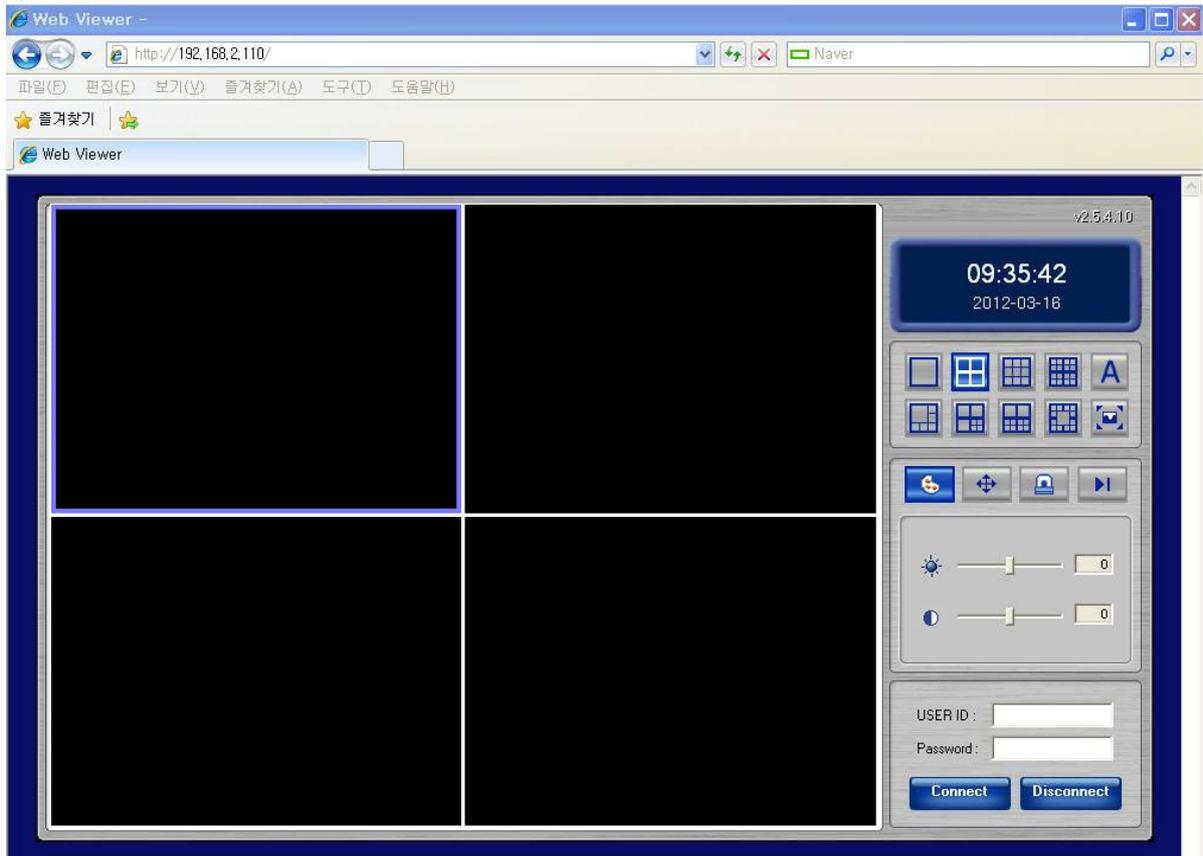
Figure 4.3.1 Active-X Installation Window

### 4.3.2 Connection to the DVR

- Enter the DVR's IP address or DDNS address to the address field of IE.

Ex) When the DDNS address is used, enter "unimocnc.ddnsdvr.com:XXXX". XXXX is the web port entered in network setup and must be entered.

### 4.3.3 Screen When Connection with the DVR is Established



- Enter the DVR network password into the field at the right bottom. Use it the same way as RAMS PRO. See "4.1.2 RAMS PRO Access".

- With Active-X, you can use various functions such as screen division, live, search, play just as RAMS PRO.

## 4.4 Introduction to Mobile Viewer

### 4.4.1 i-RAMS PRO / a-RAMS PRO



i-RAMS pro is the iPhone app (i for iPhone).

a-RAMS pro is the Android phone app (a for Android).

### 4.4.2 Search

- Android: Search a-RAMS pro in the market



- Apple: Search i-RAMS pro in the App Store.



#### 4.4.3 Access List

-ADD 

Tap this button on the access list to switch to the EDIT screen. Enter DVR information into each field to press  to save information and return to the access list.

- EDIT 

Tap this button on the access list to change the order of existing lists or delete them.

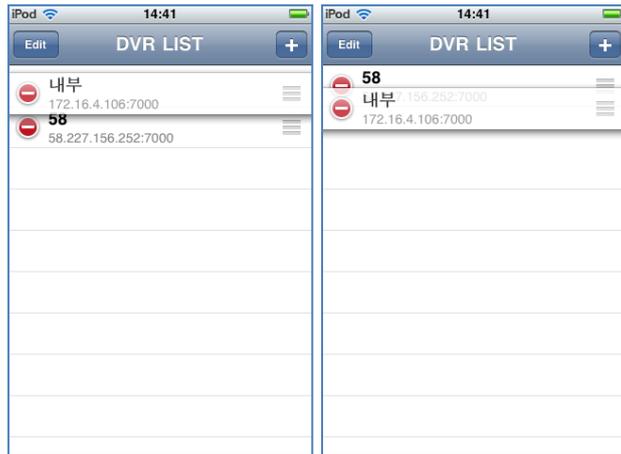
-  The icon is changed on the user-selected list.



Select the DVR. Then its icon is changed as above. Use the DELETE button on the right to delete the DVR.

- Order Change 

Press and hold this icon and move it up and down to change the order of DVRs.



- Access Information Modification 

Tap this icon to modify the address and login information of the DVR to switch to the EDIT screen.



Change information, and then tap  to save changes.

#### 4.4.4 Access

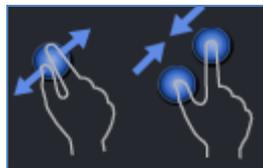


Select the square-highlighted list to access the DVR.

#### 4.4.5 Screen Division and Switch



The mobile app supports 1, 2, 8, and 16 screen divisions. Double-tap the channel to watch it only. Tap the next channel to watch it in the divided screen.



While touching the screen with two fingers, put your fingers close to switch the screen in order of 1, 2, 8, 16; and split your fingers to switch the screen in order of 16, 8, 2, 1.

#### 4.4.6 Upper Menu

- Done 

Close the mobile viewer.

- Search 

Search records on the DVR by date.



Select the date, and then tap OK.



In the above figure, bottom menus are JPEG\_EXPORT, FAST REWIND, REVERSE PLAY, PAUSE, PLAY, and FAST FORWARD.

#### 4.4.7 Bottom Menu

- Capture 

This is available only in the 1-screen mode. Double-tap the channel, and then tap this icon to save the screen as a JPEG file. (The file path is displayed during capture.)

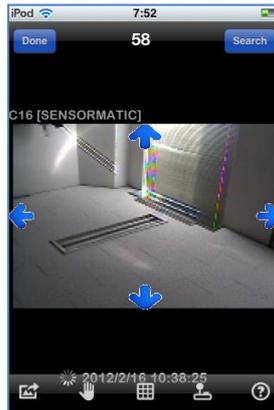
- Pause 

Pause the video. While the video is paused, the icon is switched to: 

- Screen Division 

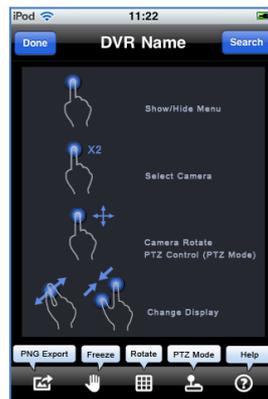
Divide the screen to 2, 8 or 16 screen. Double-tap the channel to watch it in the 1-screen mode.

- PTZ Control 



Control the PTZ camera connected to DVR. Press this icon to show arrows on the screen. Tap the arrow to move the camera.

- HELP 



Tap this icon to display the HELP page. Tap the screen to exit the HELP page.

## Chapter 5. Appendix

### 5.1 Appendix A. Firmware Upgrade

- 1) Copy the firmware file on the USB memory and connect it to the DVR via the USB port.
- 2) In the DVR, go to Menu > INFO > UPGRADE.
- 3) Select a device and press the OK button.
- 4) When the device is selected, press the START button.

After a moment, press the OK button if you want upgrade, or press the CANCEL button if not.

- 5) During upgrade, the bar appears to show its progress. When the DVR restarts, the upgrade success message appears. Remove the USB memory and click on the OK button to finish upgrade.



### 5.2 Appendix B. Specifications

- Design and specifications are subjected to change without notice.

Model	UDR-904H	UDR-908H	UDR-916H
Image System	HD-SDI:1080p / 720p Auto detection		
Multi-tasking	Quadplex		
Video In Signal	HD-SDI: SMPTE 292M		
Video Channel	4CH BNC	12CH BNC	16CH BNC
Video Output	HDMI(Main) , VGA(Sub), HDMI SPOT(8ch, 16ch)		
Video Compression	H.264		
Display Resolution	1920 X 1080p, 1920 X 1080i, 1440 X 900, 1280 X 720p		
Recording Quality	4 Levels (Low, Normal, High, Highest)		
Max Display Speed	Real-Time		
Max Recording Speed ( 1080P)	120FPS	240FPS	240FPS
Time Laps Recording Interval (fps)	1,2,3,4,5,6,7.5,10,15,30 (NTSC/720P/1080P, 10 Steps ) , 1,2,3,4,5,6,7.5,10,12.5,25 (PAL, 10 Steps)		
Recording Mode	Schedule, Event (Alarm, Motion, Video loss Detection), Manual		
Playback Search	Calendar, Event (Alarm, Motion, Video loss Detection)		
Playback Speed	x1, x2, x4, x8, x16 (Forward, Backward)		
Slow Motion	x1/2, x1/4, x1/8 (Forward, Backward)		
Sensor Input	4 (NO/NC Selectable)	8 (NO/NC Selectable)	16 (NO/NC Selectable)
Alarm Output (Relay)	1 (NO/NC) , 1 TTL	2 (NO/NC) , 1 TTL	4 (NO/NC) , 1 TTL
Audio In/Out	IN: 4ch , OUT: 1ch	IN: 8ch , OUT: 1ch	IN: 16ch , OUT: 1ch
Network	10/100/1000 Base-T (Static, DHCP, E-mail), DDNS		
3G	iPhone, iPad, android		
Private Zone	20x15		
Motion Detection	22x15, 5 Level Sensitivity		
Hard Disk	5EA ,E-SATA 1 PORT		
Hard Status	SMART Function ( Hard status )		
Backup	USB(Ver2.0), DVD-RW(Optional), Network		
PTZ Control	RS-485		
Serial Port	RS-232(Console, Reserved)		
System Log	DVR System Started, DVR System Shutdown, Recording Start, Recording Stop, Logout, ETC..		
Language	ENGLISH,CHINESE,CZECH,FRENCH,GERMAN,ITALIAN,JAPANESE,KOREAN,PORTUGUESE,RUSSIAN, SLOVAKIA,SPANISH,TAIWAN,TURKEY		
S/W Upgrade	Network, USB Memory Stick		
Password Function	Power OFF, MENU, Record OFF, Key Lock		
Power Source	Free Voltage Adaptor AC 100V ~ 240V ( 50Hz-60Hz ) / 4-2 A		
Dimension	438(W) X 440(D) X 88(H)		
Operating Temperature	5℃ ~ 40℃		
Weight	7Kg (without HDD)		

### 5.3 Appendix C. FPS Setup

**CAMERA SETUP**

CAMERA LABEL: ALL  
RESOLUTION: AUTO

CAM	NAME+	INSTALL+	HIDDEN+
1	C01	ON	OFF
2	C02	ON	OFF
3	C03	ON	OFF
4	C04	ON	OFF
5	C05	ON	OFF

OK CANCEL

---

**RECORD SETUP**

SCHEDULE RECORD MANUAL AUDIO PRE/POST

REC 1 REC 2 REC 3

CAMERA	TIME+	EVENT+
1	15, HIGHEST	15, HIGHEST
2	15, HIGHEST	15, HIGHEST
3	15, HIGHEST	15, HIGHEST
4	15, HIGHEST	15, HIGHEST
5	15, HIGHEST	15, HIGHEST
6	15, HIGHEST	15, HIGHEST
7	15, HIGHEST	15, HIGHEST

OK CANCEL

- HD Channel

\*1080P/ 1080i: Up to 30 fps can be used for one channel.

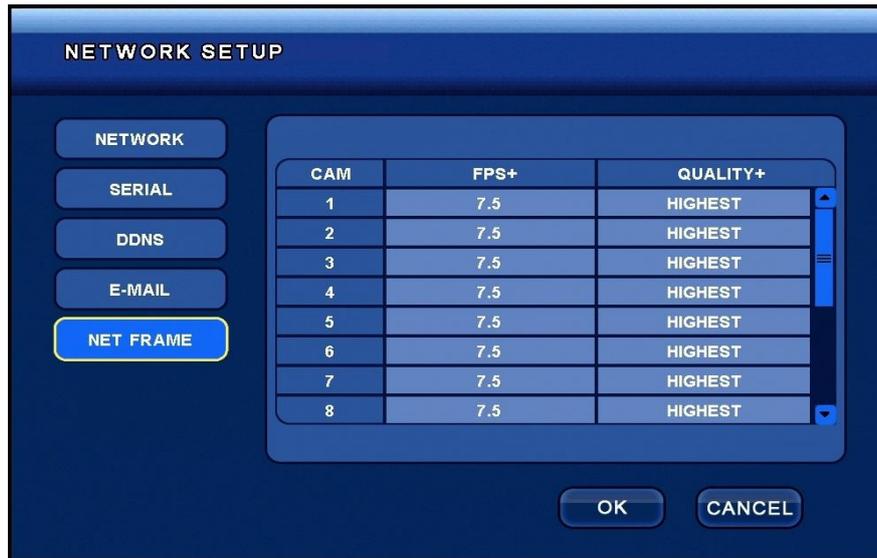
When all channels are used simultaneously, up to 240 fps is possible (average 15 fps).

However, other channels not used in camera setup should be off in INSTALL.

\*720P: Up to 30 fps can be used for one channel.

When all channels are used simultaneously, up to 240 fps is possible (average 15 fps).

However, other channels not used in camera setup should be off in INSTALL.



- Net Frame

\* Up to 30 fps can be used for one channel.

\* When all channels are used simultaneously, up to 120 fps is possible (average 7.5 fps).