

# DIGITAL VIDEO RECORDER

## USER GUIDE

### 4/8/16 CHANNELS

VER 3.01-1


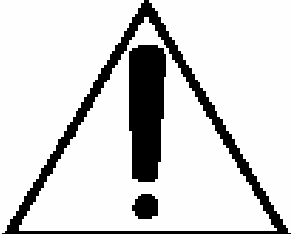


- Thank you for purchasing this Digital Video Recorder.
- Before using the Digital Video Recorder, please ensure that you read and understand the User Guide.
- Please store the User Guide at an easily accessible location.
- Before connecting and installing any third party cameras, monitors, alarms and computers, please refer to the appropriate instruction manual for proper operation.



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## **SAFETY PRECAUTIONS**

	<b>CAUTION</b> RISK OF ELECTRIC SHOCK DO NOT OPEN	
<p style="text-align: center;"><b>CAUTION:</b> TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>		



SA 1965

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of an insulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



SA 1966

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

### **WARNING:**

**TO PREVENT FIRE OR ELECTRIC SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.**

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## Warning

- Do not cover the ventilation opening or slots on the outer casing. To prevent the appliance from overheating, provide at least two inches of air space around the vent and the slots.
- Do not drop metallic parts through slots. This could permanently damage the Digital Video Recorder. Immediately turn the DVR's power off or unplug the power cord from the power outlet. Contact a qualified service personnel authorized by your equipment distributor
- Do not attempt to disassemble or alter any part of the equipment that is not expressly described in this guide. Disassembly or alteration may result in high voltage electrical shock. Qualified service personnel authorized by your equipment distributor should conduct internal inspections, alterations and repairs.
- Stop operating the equipment immediately if it emits smoke or noxious fumes. Failure to do so may result in fire or electrical shock. Immediately turn the DVR's power off, remove the power cable from the power outlet. Confirm that smoke and fume emissions have ceased. Please consult your DVR distributor.
- Stop operating the equipment if a heavy object is dropped or the casing is damaged. Do not strike or shake. Failure to do so may result in fire or electrical shock. Immediately turn the DVR's power off or unplug the power cord from the power outlet. Please consult your DVR distributor.
- Do not allow the equipment come into contact with, or become immersed in, water or other liquids. Do not allow liquids to enter the interior. The DVR has not been waterproofed. If the exterior comes into contact with liquids or salt air, wipe it dry with a soft, absorbent cloth. In the event that the water or other foreign substances enter the interior, immediately turn the DVR's Power off or unplug the power cord from the power outlet. Continued use of the equipment may result in fire or electrical shock. Please consult your DVR distributor.
- Do not use substances containing alcohol, benzene, thinners or other flammable substances to clean or maintain the equipment. The use of these substances may lead to fire. Use a dry cloth on a regular periodic basis and wipe away the dust and dirt that collects on the device. In dusty, humid or greasy environments, the dust that collects around the ventilation or the slots on the outer casing over long periods of time may become saturated with humidity and short-circuit, leading to fire.
- Do not cut, damage, alter or place heavy items on the power cord. Any of these actions may cause an electrical short circuit, which may lead to fire or electrical shock.
- Do not handle the device or power cord if your hands are wet. Handling it with wet hands may lead to electrical shock. When unplugging the cord, ensure that you hold the solid portion of the plug. Pulling on the flexible portion of the cord may damage or expose the wire and insulation, creating the potential for fires or electrical shocks.
- Use only the recommended power accessories. Use of power sources not expressly

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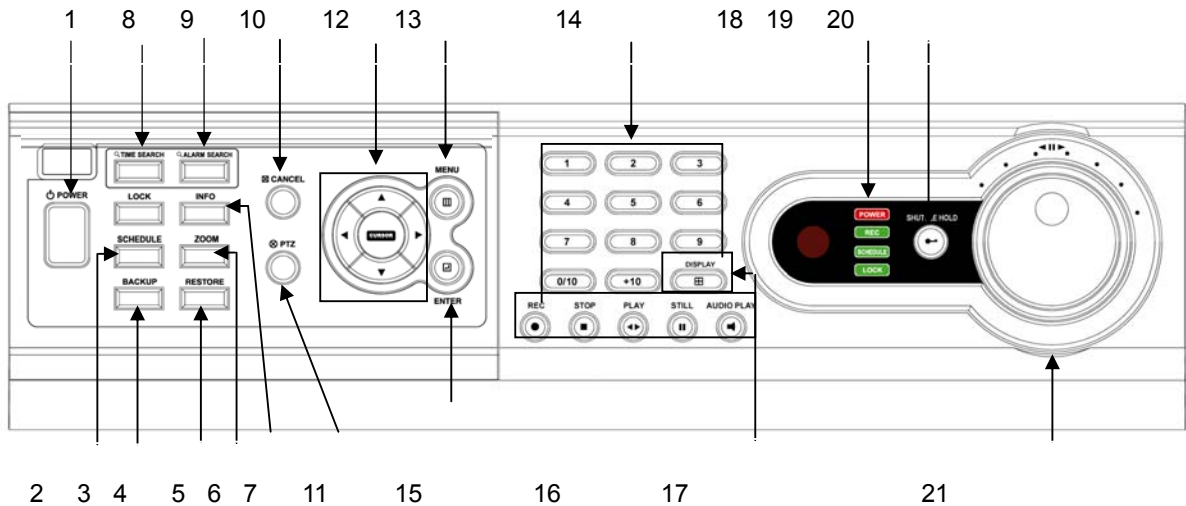
recommended for this equipment may lead to overheating, distortion of the equipment, fire, electrical shock or other hazards.

- Do not place the batteries near a heat source or expose them to direct flame or heat. Neither should you immerse them in water. Such exposure may damage the batteries and lead to the leakage of corrosive liquids, fire, electrical shock, explosion or serious injury.
- Do not attempt to disassemble, alter or apply heat to the batteries. There is serious risk of injury due to an explosion. Immediately flush with water any area of the body, including the eyes and mouth, or clothing that comes into contact with the inner contents of the battery. If the eyes or mouth contact these substances, immediately flush with water and seek medical assistance from a medical professional.
- Avoid dropping or subjecting the batteries to severe impacts that could damage the casings. It could lead to leakage and injury.
- Do not short-circuit the battery terminals with metallic objects, such as key holders. It could lead to overheating, burns and other injuries.
- The supplied power supply and power cord are designed for exclusive use with the Digital Video Recorder. Do not use it with other products or batteries. There is a risk of fire and other hazards.
- Do not operate the appliance beyond its specified temperature, humidity or power source ratings. Do not use the appliance in an extreme environment where there is high temperature or high humidity. Use the device at temperatures within +5°C - +40°C (41°F - 104°F) and humidity below 90 %. The normal operating power source for this device is 110V-220V AC 50/60Hz.
- Fully charge up the backup battery. Keep the appliance turned on for at least 48 hours to recharge the backup battery. This procedure is necessary when using the appliance for the first time or after it has been unplugged for a long time from the AC outlet. Insufficient charging of the battery may cause erasure of settings if the AC power supply should fail. The battery, if fully charged, will back up the settings for 48 hours in an ordinary environment.
- The functions of the DVR and the content of the manual may change at any given time without notice.

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# CONTROLS

## 1. Front Panel Controls



### 1) POWER button

Press this button to turn the power on; press again to turn the power off. The POWER LED (red) lights/goes off when the power is on/off. It flashes when switching during initializing and disk checking.

### 2) LOCK button

Press this button to lock all unit's key buttons including the remote controller.

The LOCK LED (green) lights/goes off when the lock is on/off. To release press it again and enter the administrator password.

### 3) SCHEDULE button

Press this button to make scheduled recording standby. The SCHEDULE LED (green) lights/goes off when the schedule is on/off.

### 4) BACKUP button

Press this button to begin making a backup copy of the hard drive. If there is no peripheral recording device connected, this button cannot be used.

### 5) RESTORE button

Press this button to restore recorded data to the main hard disk from an archive device only when an external USB DAT24 is connected.

### 6) ZOOM button

Press this button to display zoom area box; press again to enlarge the image. Pressing cursors can move this zoom area.

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**7) INFO button**

Press the button to display current system information; press again to display log list.

**8) TIME SEARCH button**

Press this button to display the Time Search menu.

**9) ALARM SEARCH button**

Press this button to display the Alarm Search menu.

**10) CANCEL button.**

In Zoom mode, pressing this button reduces the image. In stop mode and playback mode, pressing this button disappears time & date OSD. Pressing it again appears the OSD.

**11) PAN/TILT button**

Press this button to control a PAN/TILT camera via RS-232 connection

**12) Direction (▼▲◀▶) buttons.**

In Menu setup mode, used to move the cursor. In Zoom mode, used to move the zoom area.

**13) MENU button**

Press this button to display the MAIN MENU screen. It is also used as EXIT button to exit all kinds of OSD screen

**14) Numeric buttons (NO. 1~9, +10, 0/10)**

Used to enter the password and select the camera numbers.

**15) ENTER/ CH SEL button.**

Press this button to confirm new set-up on the menu. Press this button to switch one of small view to main view on 6,8 or 13 channel display mode

**16) AUDIO PB button**

Press this button to synchronize the sound track with the scenes.

**17) Display button**

Press this button to display the cameras in quad mode or to switch sequence function.

**18) Remote control signal receiver.**

**19) Mode Indicator.**

**20) SHUTTLE HOLD button**

This button retains the selected playback or reverse playback speed.

Rotate the SHUTTLE ring to the desired search speed, and then press the SHUTTLE HOLD button while holding the SHUTTLE ring at the selected search speed. Search speed will be maintained even when the SHUTTLE ring is returned to its original position.

**21) Jog and shuttle operation**

**SHUTTLE ring**

Use the ring to set various menus and search functions, to adjust the playback speed, and to rewind or forward the image.

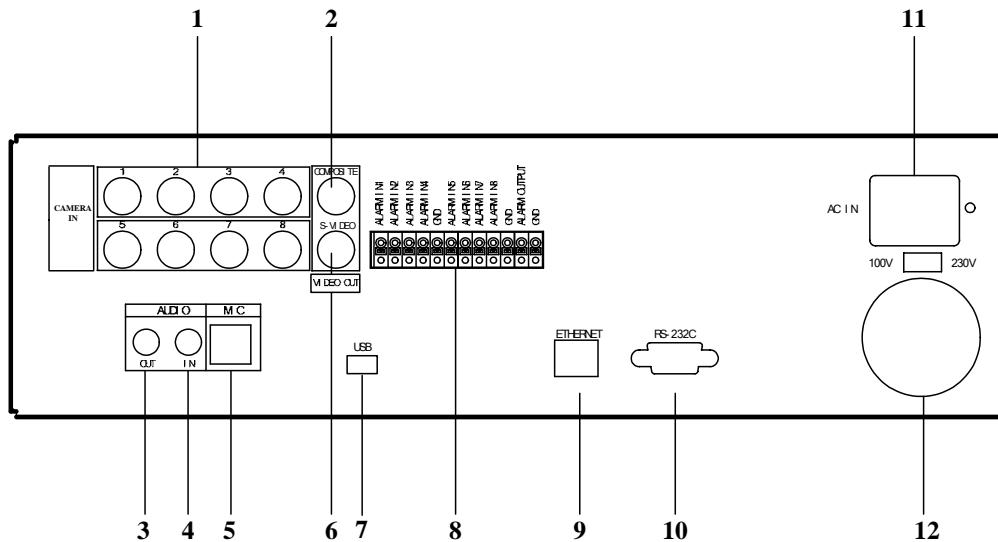
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## JOG dial

Use the dial to set various menus and search functions, and to forward or reverse the image during playback (field-by-field).

## 2. Rear Panel Connectors

<Ex: 8ch DVR>



### 1) CAMERA IN connectors

These are BNC input connectors for 8 cameras.

cf. 4ch – 4 INPUT/ 4 Loop out , 16ch -16 Input

### 2) VIDEO OUT connectors

A BNC standard composite video output connector.

### 3) AUDIO OUT connector

This is an RCA output for an audio signal.

### 4) AUDIO IN connector

This is an RCA input for an audio signal.

### 5) MIC jack

This is an input connector for a microphone.

### 6) S-VHS OUT connector

An S-VHS connector for separate luminance and chrominance (Y/C) signals This is an RCA input connector for an audio signal.

### 7) USB 2.0 connector

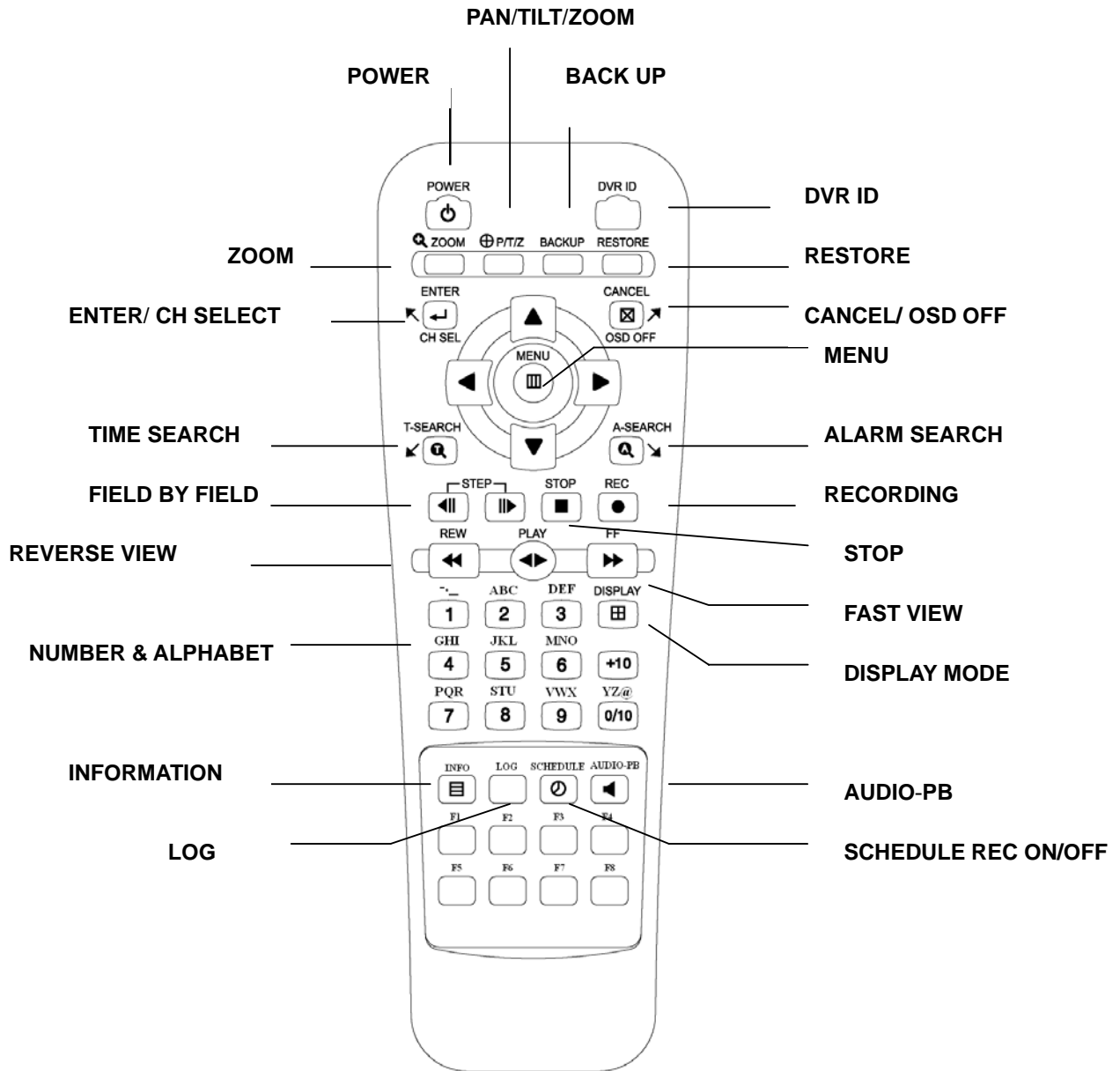
This connector is for peripheral recording device.

### 8) ALARM IN/OUT terminal.

### 9) RJ-45 ETHERNET connector

- 10) RS-232C
- 11) AC power socket
- 12) Power Fan

### 3. Remote Controller

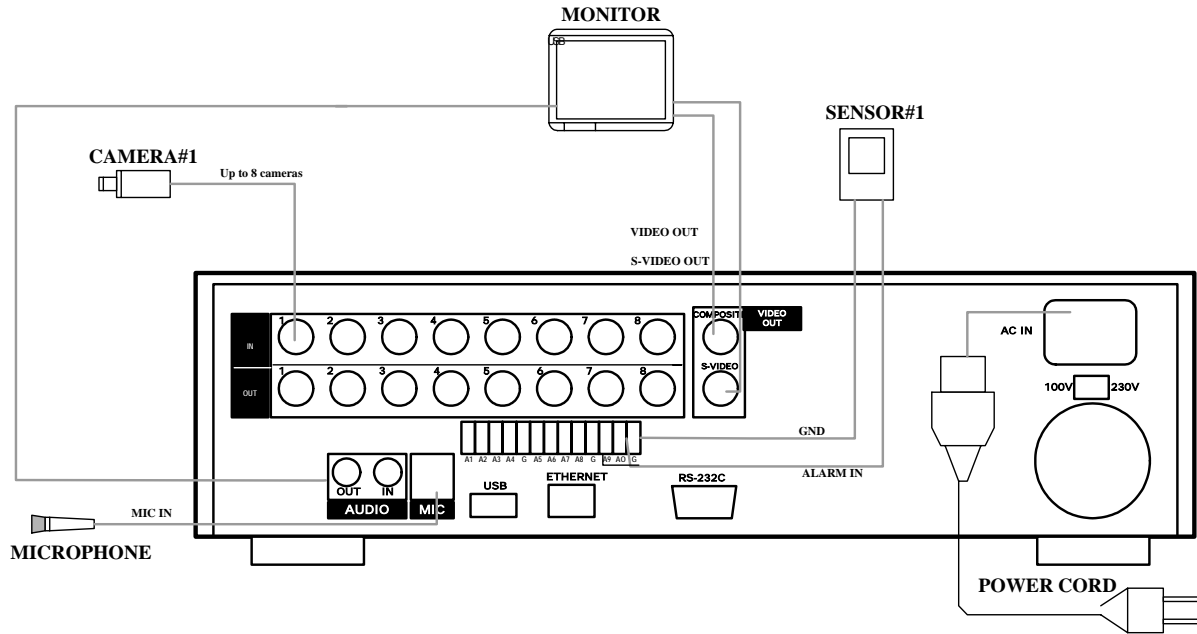


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# INSTALLATION & CONNECTIONS.

## 1. Camera, Monitor, Microphone, Alarm sensor and Power cord.

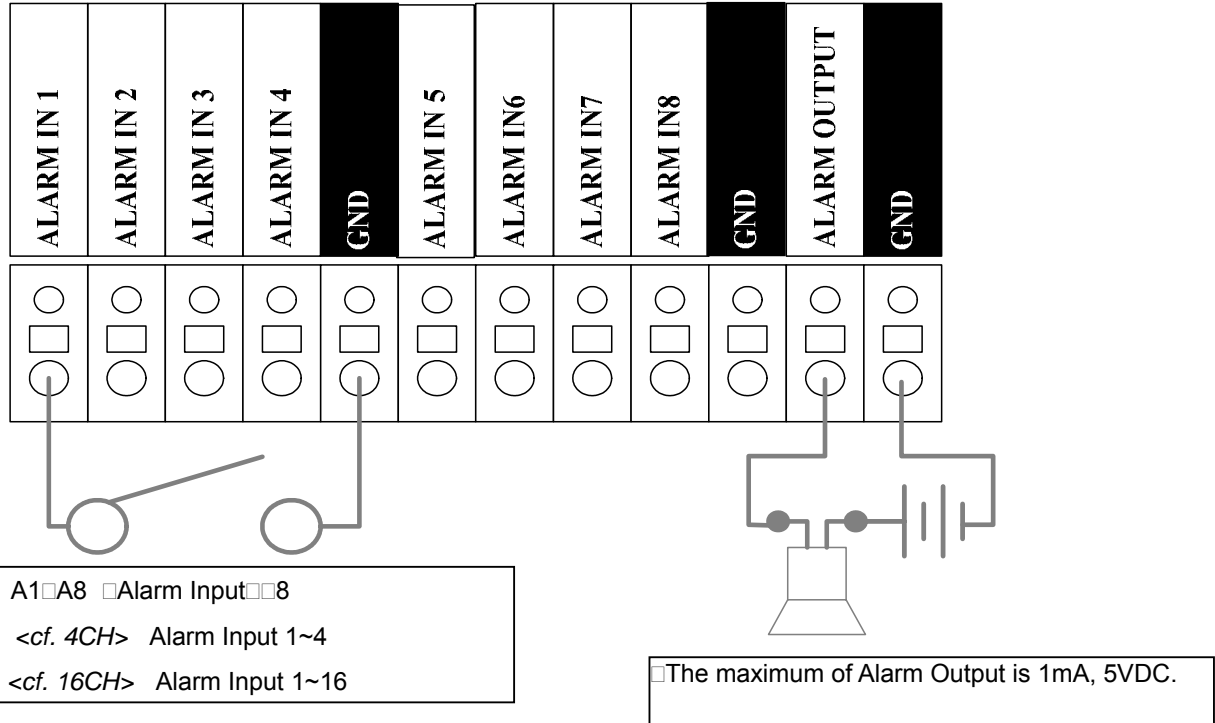
(Example of 8ch DVR )



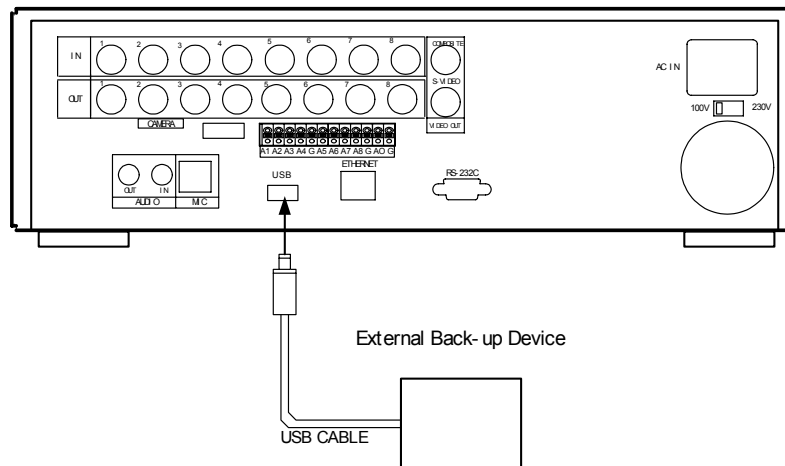
<Note> You could connect 8 Cameras & 8 Alarm sensors for the 8ch DVR and 4cameras & 4 alarms for the 4ch DVR and 16 cameras & 16 alarms for the 16ch DVR.

## 2. Alarm inputs and Alarm outs.

◇ Connection of N.O (Normally Open)

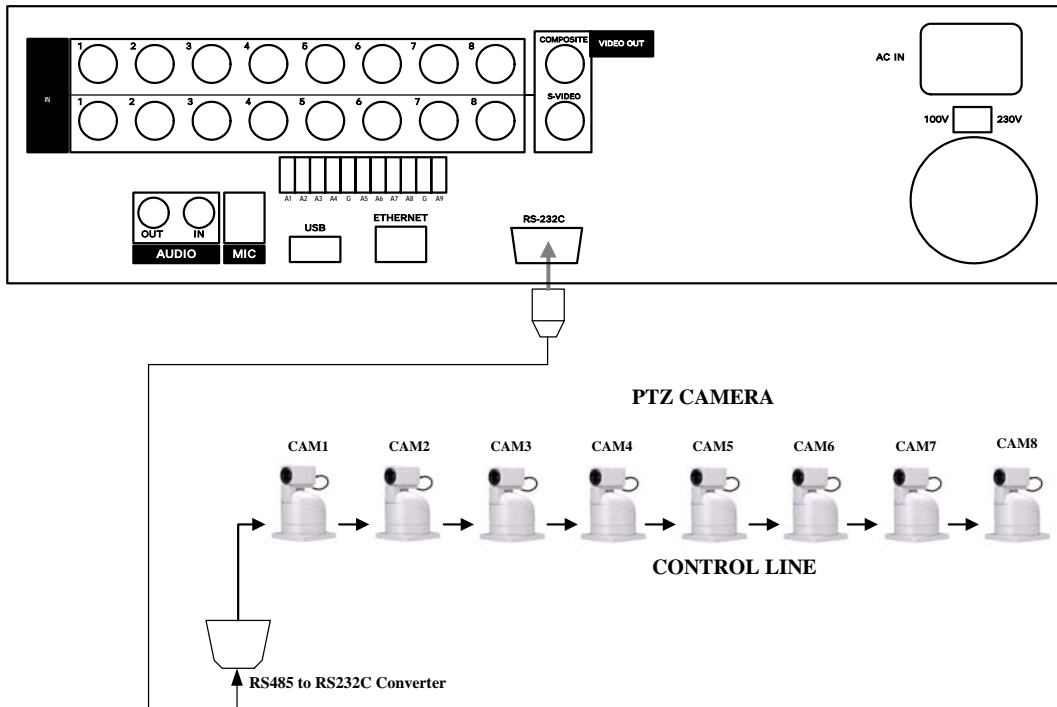


## 3. External Backup Device connections.



#### 4. PAN/TILT/ZOOM Camera

- 1) PTZ CAMERA LIST (PAGE: 41)
- 2) The other models: as buyers request; the camera sample and protocol should be supported.



#### 5. PC system requirement for Network connection.

- (a) 500MHz CPU
- (b) 128MB RAM
- (c) 4MB Video Card
- (d) Windows 98SE, 2000, ME
- (e) Spare 10/100-BaseT Ethernet Port
- (f) RJ-45 Network Cable
- (g) CAT-5 UTP Cable for LAN (Crossover cable for direct connect to PC)

#### <Disclaimer>

The connection and remote viewing of the DVR may not be successful on all PC's due to the variety of PC's internet connection settings.  
Please contact the technical support for further assistance.

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# OPERATION

## 1. Time / Date Setting

- 1) When the DVR is turned on, 'TIME/DATE SET' menu appears after initializing.
- 2) Then enter Time & Date with numeric buttons (0-9).
- 3) After that, press the "Menu" button to set-up and exit.



**< Note>**: There is a rechargeable battery inside the DVR to preserves the DVR's setting information in case there is power loss to the unit. Initially, the battery needs to be recharged for at least six hours when the DVR is first installed. The battery will preserve custom settings for approximately ten days.

**< Note>**: Factory default password is "000000". It is recommended to change the "Password" when you install the DVR. See the page 38 for reference.

## 2. Screen Position Adjustment.

While live view or playback, press the direction (▼▲◀▶) buttons.

- ▼ : The screen moves down.
- ▲ : The screen moves up.
- ◀ : The screen moves left.
- ▶ : The screen moves right.

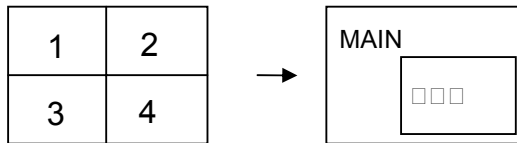
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### 3. Live View

#### 1) Live view mode switching

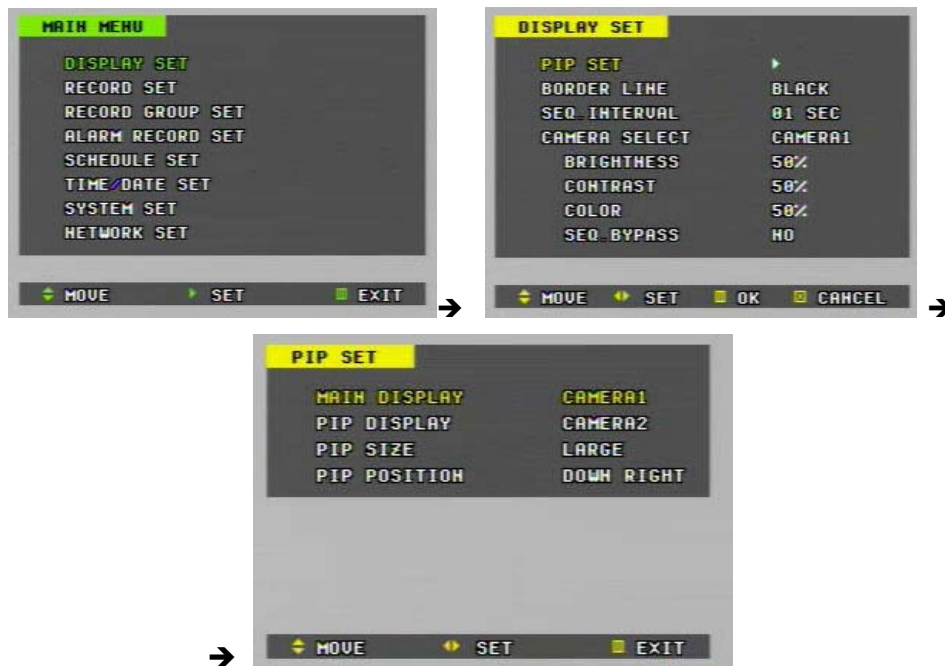
Press the 'QUAD' (□) Button to switch display modes

1-1) Example of 4ch Quad → Sequence → PIP → Quad



#### \* PIP setting (4ch Only)

- On the PIP live view mode, press the "MENU" button to go in the " MAIN MENU"
- While the "DISPLAY SET" flashes press the ► button or turn the SHUTTLE ring to the right to enter



- Main Display /PIP Display

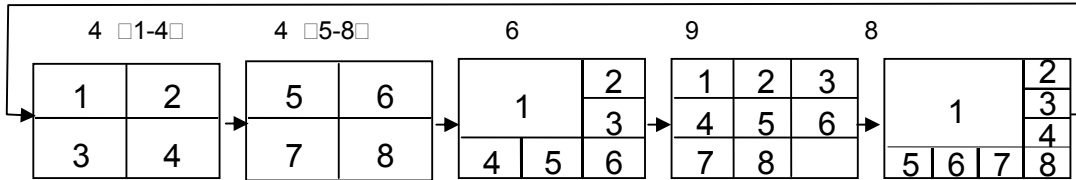
: Press the "►" button to select the camera numbers and the "▼▲" buttons to move the cursor.

- PIP SIZE: SMALL ↔ LARGE

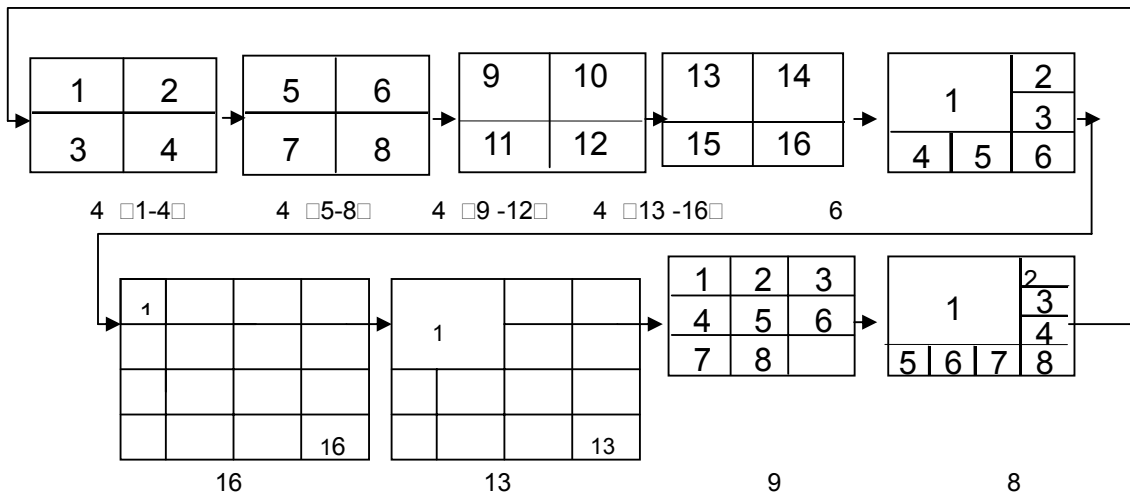
- PIP POSITION: DOWN RIGHT ↔ UP LEFT ↔ UP RIGHT ↔ DOWN LEFT

- Press the MENU button to exit the MENU

1-2) Example of 8ch : 9 → 8 → Quad → 6



1-3 ) Example of 16ch: 16 → 13 → 9 → 8 → Quad → 6



- \* To switch one of small view to main view on 6, or 8 channel display mode
- Press the “ENTER/ CH Select” button on IR remote or on the Front.
- While the boarder line of CH1(main) flashes press the desired channel number.



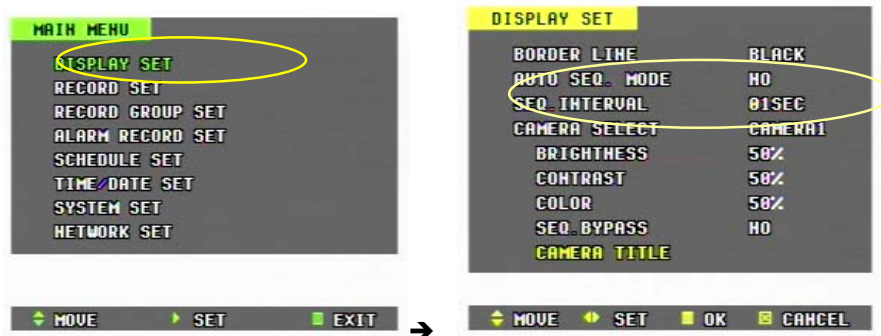
## 2) Border Line Color



- Press the “MENU” button to go in the “ MAIN MENU”
- While the “DISPLAY SET” flashes press the ► button or turn the SHUTTLE ring to the right to enter
- Press the ▼ button to move the cursor to the “BORDER LINE”.
- Then, press the ► button to select a line color.

**BLACK (default) ↔ DARK GRAY ↔ GRAY ↔ WHITE**

## 3) Auto Sequence (Camera switching interval)

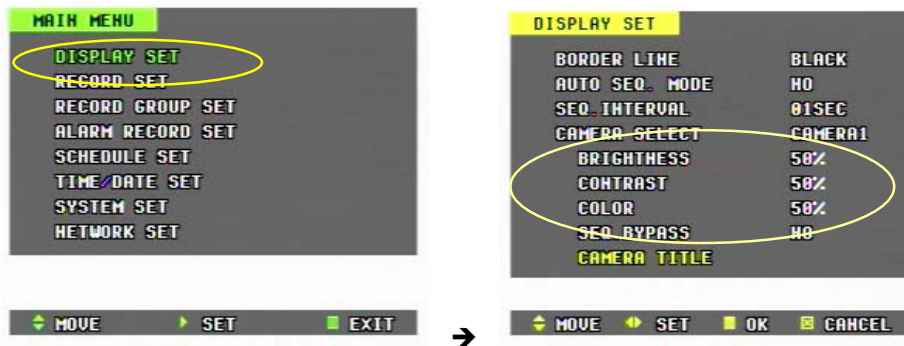


- On the sequential display mode, press the “MENU” button to go in the “ MAIN MENU”
- While the “DISPLAY SET” flashes press the ► button or turn the SHUTTLE ring to the right to enter.
- Press the ▼ button to move the cursor to the “AUTO SEQ. MODE” and select “YES”
- Then, press the ► button to select interval time.

**01 SEC(default) ↔ 02 SEC ↔ 03 SEC ↔ 04 SEC ↔ 05 SEC**

**< Note> 8ch/16ch:** It applies to Full screen display and Quad mode.



#### 4) Brightness, Contrast & Color adjustment




- Press the “MENU” button to go in the “ MAIN MENU”
- While the “DISPLAY SET” flashes press the ► button or turn the SHUTTLE ring to the right to enter.
- Press the ▼ button to move the cursor to the “CAMERA SELECT”.
- Then, press the ► button to select a desired camera.

**CAM1 (default) ↔ CAM2 ↔ CAM3 ↔ CAM4 (↔...↔CAM8)**

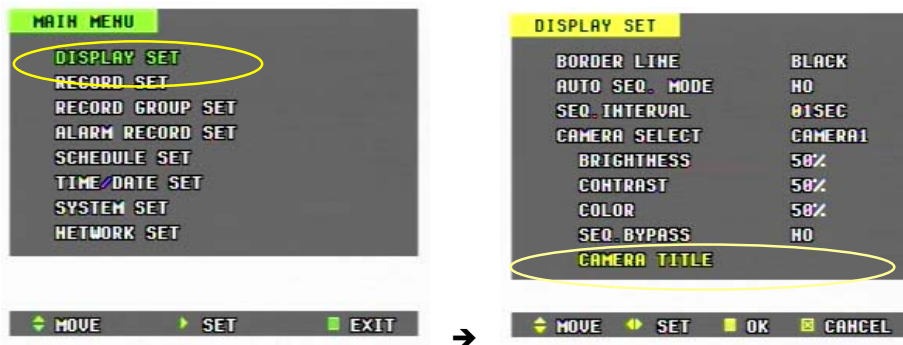
- After selecting the desired camera, press the ▼ button to move the cursor down to the “BRIGHTNESS”, “CONTRAST” or “COLOR”
- Then, press the ► button to adjust.

ITEM	DEFAULT	ADJUTMENT
BRIGHTNESS	50%	 <ul style="list-style-type: none"> <li>- Camera number can be switched by pressing the number buttons (1,2,3,~8 ) <i>cf. 4ch (1~4), cf. 16ch (1~16)</i></li> <li>- The brightness of each camera can be adjusted by pressing ◀ ▶ buttons or by turning the SHUTTLE ring</li> </ul>
CONTRAST	50%	 <ul style="list-style-type: none"> <li>- Camera number can be switched by pressing the number buttons (1,2,3~8) <i>cf. 4ch (1~4), cf. 16ch (1~16)</i></li> <li>- The contrast of each camera can be adjusted by pressing ◀ ▶ buttons or by turning the SHUTTLE ring</li> </ul>

COLOR	50%	 <p>- Camera number can be switched by pressing the number buttons (1,2,3~8) <i>cf. 4ch (1~4), cf. 16ch (1~16)</i></p> <p>- The contrast of each camera can be adjusted by pressing ◀▶ buttons or by turning the SHUTTLE ring</p>
SEQ. BYPASS (Camera By pass)	NO	YES, or NO If the SEQ. BYPASS is YES, the selected camera will not be shown in the sequential display mode.

To complete the setting and exit, press MENU button or SHUTTLE HOLD button.

## 5) Camera Title



- i. Press the “**MENU**” button to go in the “**MAIN MENU**”
- ii. While the “**DISPLAY SET**” flashes press the ▶ button or turn the SHUTTLE ring to the right to enter
- iii. Press the ▼ button to move the cursor to the “**CAMERA TITLE**”.
- iv. Then, press the **Numeric button** to type camera title. It's up to 8 characters.



No	1 <sup>st</sup> Press	2 <sup>nd</sup> Press	3 <sup>rd</sup> Press
1	-	.	-
2	A	B	C
3	D	E	F
4	G	H	I
5	J	K	L
6	M	N	O
7	P	Q	R
8	S	T	U
9	V	W	X
0/10	Y	Z	@

#### 4. Basic Recording.



- 1) Press the “MENU” button to go into the “ MAIN MENU”
- 2) Press the ▼ button to move the cursor to the “RECORD GROUP SET”
- 3) While the “RECORD GROUP SET” flashes press the▶ button or turn the SHUTTLE ring to the right to enter
- 4) Then, set the picture quality and recording rate of each camera.

ITEM	DEFAULT	ADJUTMENT
DIFINE GROUP	GROUP1	Up to 4 different recording modes (GROUP) can be pre-determined. <b>GROUP1□GROUP2□GROUP3□GROUP4</b>
PICTURE QUALITY	HIGH+	Select the picture quality <b>SUPER+ ↔ SUPER ↔HIGH+ ↔ HIGH ↔</b> <b>MID+ ↔ MID ↔ LOW+ ↔ LOW</b>
CAMERA1 ~ CAMERA 4 (8, 16)	4F/S	Select the capture rate of each camera. <u>NTSC setting</u> <b>30F/S↔15F/S↔10F/S↔7F/S↔6F/S ↔5F/S↔4F/S</b> <b>↔3F/S↔2F/S↔1F/S ↔30F/M (minute) ↔20F/M↔</b> <b>→12F/M↔6F/M↔4F/M↔3F/M↔2F/M↔1F/M↔00F/S</b>
	4F/S	<u>PAL setting</u> <b>25F/S↔12F/S↔10F/S↔7F/S ↔6F/S↔5F/S↔4F/S</b> <b>↔2F/S↔3F/S↔1F/S↔30F/M(minute)↔20F/M↔12F/M↔</b> <b>6F/M↔4F/M ↔3F/M↔2F/M↔01F/M↔00F/S</b>
<p><b><u>Real-Time Recording</u></b></p> <p>If you wish to record in real-time mode, set only camera 1 &amp; camera 2.</p> <p><b>NTSC: 30F/S, PAL: 25F/S</b></p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><b>&lt;Note&gt;</b> when real-time recording (camera 1 &amp; 2 or one of two cameras), the others will not activate at all, even the network image transmission of the camera 3 ~4.(8,16)</p> </div>		

**<Note> Recording Speed setting.**  
 NTSC 30F/S(PAL: 25F/S) : Only for Channel 1 and 2.  
 If you select the real-time recording speed (NTSC: 30F/S, PAL: 25F/S), it automatically disables channels 3~8.  
 NTSC 15F/S(PAL: 12F/S) : It applies to Ch 1~Ch4.  
 NTSC 10F/S(PAL: 10F/S): It record 6 channels- Ch 1~Ch6.

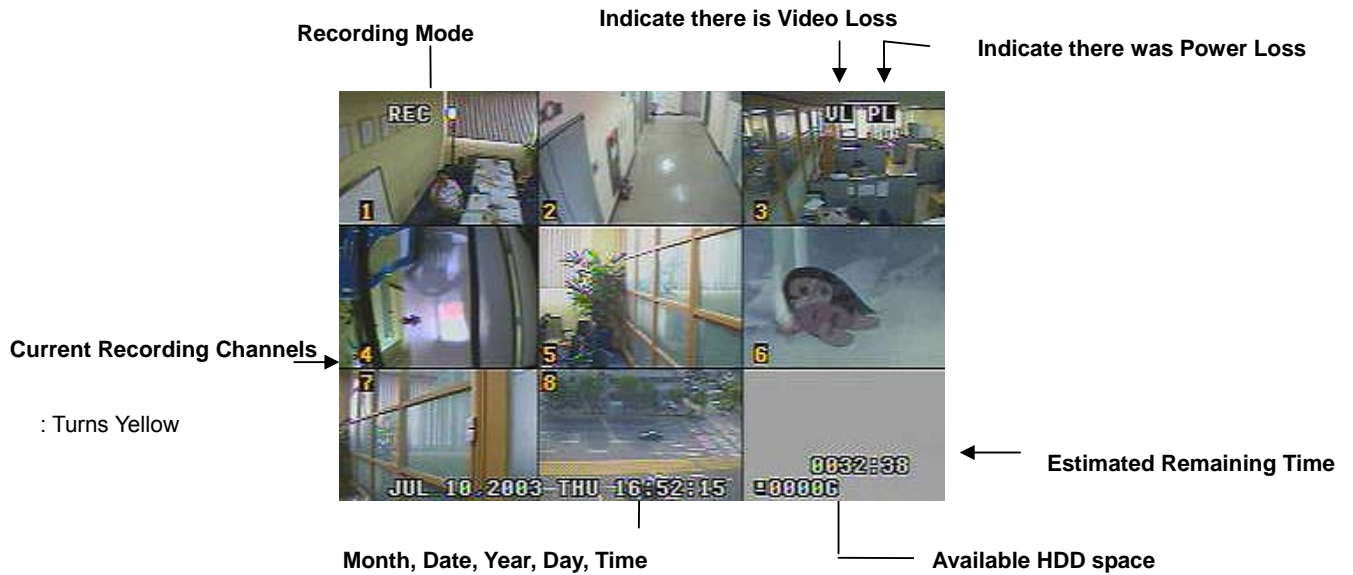
**<Note>Recording Speed setting2.**  
 The Total amount of Recording speed may not exceed Maximum Speed (NTSC:60, PAL: 50)

c	Recording Speed (F/S)						
CH1	30	15	10	7	1-6	4 ...	0
CH2	30	15	10	7	1-6	4 ...	0
CH3	X	15	10	7	1-6	4 ...	0
CH4	X	15	10	7	1-6	4 ...	0
CH5	X	X	10	7	1-6	4 ...	0
CH6	X	X	10	7	1-6	4 ...	0
CH7	X	X	X	7	1-6	4 ...	0
CH8	X	X	X	7	1-6	4 ...	0
CH9	X	X	X	X	1-6	4 ...	
CH10	X	X	X	X	1-6	4 ...	
CH11	X	X	X	X	1-6	4 ...	
CH12	X	X	x	X	1-6	4 ...	
CH13	X	x	X	x	1-6	4 ...	
...	X	X	X	X	X	4 ...	
CH16	x	x	x	x	x	4 ...	

5) Press the “MENU” button to set up and go back to the “MAIN MENU”



- 6) Then, go into the “RECORD SET”
- 7) On the “RECORD GROUP”, select one of four Recording modes (Group) you wish to record.
- 8) Select an audio recording source (MIC or LINE) if audio is connected.
- 9) After that, press the “MENU” button to exit.
- 10) Press the REC button. Then, the red REC LED lights on the front panel and recording starts.
- 11) To stop recording, press the “STOP” button.



**<Note>** Estimated Recording Time varies due to picture quality and capture rate and is updated every 20 seconds due to variation of picture size.

When REPEAT RECORD is **NO**; Estimated Recording Time until HDD Full..

When REPEAT RECORD is **YES**; Estimated Recording Time until the start of overwriting HDD..

## 5. Alarm Recording



- 1) Press the “MENU” button to go into the “ MAIN MENU”
- 2) Press the ▼ button to move the cursor to the “ALARM RECORD SET”
- 3) While the “ALARM RECORD SET” flashes press the▶ button or turn the SHUTTLE ring to the right to enter.
- 4) Settings

ITEM	DEFAULT	ADJUTMENT
ALARM RECORD GROUP	GROUP 1	Select one of Groups for Alarm ALL recording mode.
ALARM DURATION	60SEC	Determines the duration of recording period after the alarm signal has been activated. <b>20SEC ↔ 40SEC ↔ 60SEC ↔ 80SEC ↔ 100SEC ↔ 120SEC ↔ 180SEC ↔ 240SEC</b>
RECORD CAMERA	ALL	- <b>ALL</b> : It records all channels when Alarm occurs. - <b>1:1</b> : It records 1 channel by 1 alarm input.
AUDIO RECORD	NO	Determines whether audio is recorded with images when an alarm signal is input. It disregards the setting of audio recording on the “RECORD SET <b>NO ↔ MIC ↔ LINE</b>
ALARM BUZZER	NO	<b>YES</b> : The buzzer Sounds if an alarm is triggered. Stops when the alarm recording stops. <b>NO</b> : Disables the ALARM BUZZER function.
ALARM OUT	LOW	LOW ( 0~0.8V) ↔ HIGH (4~5V)
		Select a sensor you wish to determine input and output type of

ALARM INPUT	SENSOR1	the alarm. DC 4~5V(open), DC 0~0.8V(closed) <b>SENSOR1 ↔ SENSOR2 ↔ SENSOR3 ↔ SENSOR4</b> <b>SENSOR5 ↔ SENSOR6 ↔ SENSOR7 ↔ SENSOR8</b>
INPUT TYPE	OFF	OFF : Alarm recording OFF. N.C (Normally Closed): Accepts alarm signals in the open state. N.O (Normally Open): Accepts alarm signals in the closed state.

To complete the setting and exit, press MENU button or SHUTTLE HOLD button.

**<Note>** REC LED on the front panel flashes on the standby mode of Alarm recording.

- 5) Alarm recording starts when an ALARM IN terminal is triggered by an alarm sensor.
- 6) If the unit receives a new alarm signal while in the alarm recording mode, the alarm duration is recounted from the beginning.
- 7) When the alarm is cleared, the recording mode resumes to the previous recording mode.



## 6. PRE-Recording



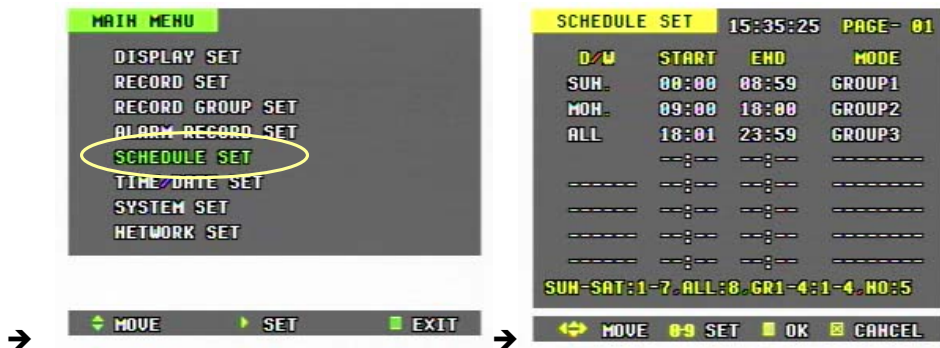
- 1) Press the “MENU” button to go into the “ MAIN MENU”
- 2) Press the ▼ button to move the cursor to the “RECORD SET”
- 3) While the “RECORD SET” flashes press the ► button or turn the SHUTTLE ring to the right to enter.
- 4) Press the ▼ button to move the cursor to the “PRE-RECORD”
  - When PRE- RECORD is YES; It records the most recent 140 images.

**<Note>** It applies to all recording types; Basic Recording, Alarm Recording, Motion Recording, Schedule recording.

## 7. Schedule Recording (Timer Recording)



**\*\* Before engaging different schedules for recording, you need to set recording modes for recording groups 1 through 4; see BASIC RECORDING.**



- 1) Press the “MENU” button to go into the “ MAIN MENU”
- 2) Press the ▼ button to move the cursor to the “SCHEDULE RECORD SET”
- 3) While the “SCHEDULE RECORD SET” flashes press the▶ button or turn the SHUTTLE ring to the right to enter.
- 4) To set the day, time and group, press the NUMERICAL button.
- 5) To move the cursor to the right/left, press the ◀▶ buttons or turn the SHUTTLE ring.
- 6) To move the cursor up/down, press the ▲ ▼ buttons or turn the JOG dial.
- 7) Setting

Settings ITEM	DEFAULT	ADJUTMENT
D/W (Day of Week)	-	<b>Sunday: 1, Monday: 2, Tuesday:3, Wednesday: 4, Thursday: 5, Friday: 6, Saturday:7. ALL : 8 (Every day)</b>
START	-	The time of recording start.
END	-	The time of recording end. The ending time must not be before

		the starting time or the same as the starting time. It must be any time over the starting time.
MODE	-	NO : inactivate the recording. GROUP1 ~ GROUP4 : select one of groups. Deletion: To delete each line, select the MODE as '-----' then exit to menu. (Use No 6 button on Mode)

**<Note>** The recording time is set by 24H. You need to set 2 days if the setting is over one day.  
The recording would not start when Ending time is ahead of Start time

To complete the setting and exit, press **MENU** button or SHUTTLE HOLD button.

**<Note>** REC LED on the front panel flashes on the standby mode of Schedule recording.

- 8) To activate the schedule recording after setting, press the **SCHEDULE** button. The SCHEDULE indicator illuminates.
- 9) When a program covers the current time, the REC indicator illuminates and the unit begins recording.
- 10) When the scheduled recording time is over, the REC indicator goes off and recording stops.
- 11) If you wish to stop recording while scheduled recording, press the SCHEDULE button, then the SCHEDULE indicator goes off and the Schedule Recording Mode is released.



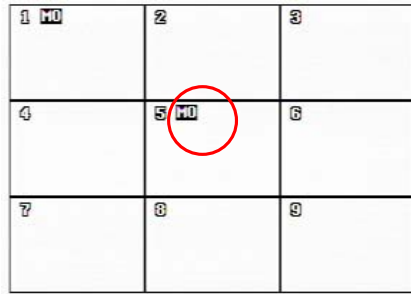
## 8. Motion Detected Recording (MOTION RECORD)



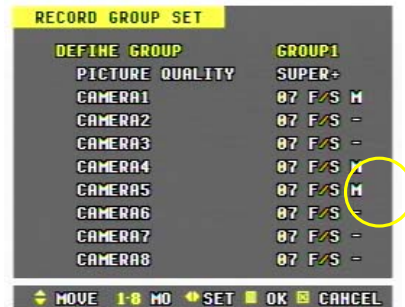
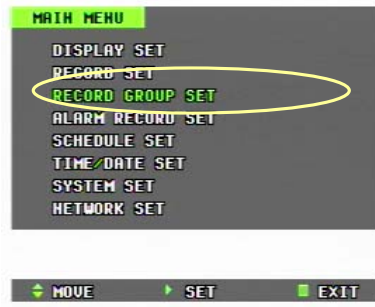
- 1) Press the “MENU” button to go into the “ MAIN MENU”
- 2) Press the ▼ button to move the cursor to the “RECORD SET”
- 3) While the “RECORD SET” flashes press the▶ button or turn the SHUTTLE ring to the right to enter
- 4) Press the ▼ button to move the cursor to the “MOTION DURATION”
- 5) Then, Select recording duration when motion is detected  
**20 SEC– 40 SEC (Default)– 60 – 80 – 100 – 120 – 180 – 240 SEC**
- 6) Select the camera you desire to Motion Record
- 7) Press the ▼ button to move the cursor to the “MOTION SENSITIVITY” and then, Select the MOTION SENSITIVITY Level.

ITEM	DEFAULT	ADJUTMENT
MOTION SENSITIVITY	8	Level 1: Low sensitivity~ Level 15: High sensitivity <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <p><b>&lt;Note&gt;</b> Motion sensitivity also varies upon on the number of blocks you select</p> </div>

- 8) Press the ▼ button to move the cursor to the “MOTION AREA SET”
- 9) While the “MOTION AREA SET” flashes press the▶ button or turn the SHUTTLE ring to the right to enter. Then, motion blocks are appeared.
- 10) Select desired motion blocks by pressing numeric buttons.



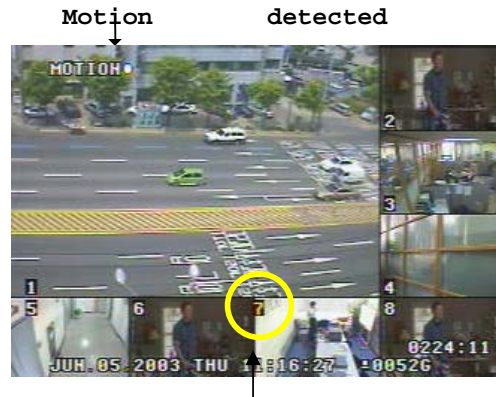
11) Then, go back to the “RECORD GROUP SET” by pressing the MENU button.



12) Press the channel button(s) you wish to activate ‘motion detected recording’.

Then, ‘M’ is appeared next ‘F/S’.

13) To complete the setting and exit, press MENU button or SHUTTLE HOLD button.



\* Motion Detected channel flashes and turns to yellow color when it starts recording.

**<Note>** REC LED on the front panel flashes on the standby mode of Motion recording.

**<Note>** There may be cases when the recorder’s built-in motion detection function does not operate properly due to the condition of the input video signal or other factors.

**<Note>** It is recommended selection of at least 3 motion blocks to get more accurate motion recording.

**<Note>** Each channel starts motion recording separately with time interval upon on the motion detected.

---

## 9. PLAYBACK

### 1) Basic Playback

- a) Press the **PLAY** button while recording or in stop mode.

The oldest recording file on the hard disk is played back when you press the PLAY button for the first time after the power is turned on.

After the first time, subsequent pressing of the **PLAY** button will resume playback from the point where it was stopped.

- b) To switch the camera, press the desired camera number while playback.

To switch display mode, press the Quad (□) button while playback.

To switch one of small view to main view on 6 or 8 channel playback mode.

- ENTER/ CH Select” button on IR remote or “No9 “on the Front.
- While the boarder line of CH1(main) flashes press the desired channel number.



- c) When the end of HDD is reached while playback, playback continues from the beginning of HDD.

- d) Press the **STOP** button to stop playback. If the unit is recording while playback, pressing the **STOP** button once stops only playback. Pressing the **STOP** button twice stops recording.



---

## 2) Reverse Playback

- a) During playback, press **PLAY** button to reverse the direction of the playback.
- b) To revert the direction, press the **PLAY** button again.

### Reverse Playback



## 3) Field by field (Still field) Playback

- a) Press the **STILL** button during playback. The unit shifts in to still-field mode.
- b) JOG dial;

Turn the **JOG** dial in either direction during still-field playback.

Turn the **JOG** dial one stop to the right to move forward one field and one stop to the left to move back one field. Continue turning the **JOG** dial to the right for forward playback of consecutive fields and to the left for reverse playback of consecutive frames. Stop turning the dial for still-field viewing.

- c) Remote controller;

Press the forward step button (⏮) to move forward field by field (picture by picture).

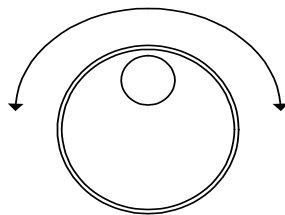
Press the reverse step button (⏭) to move reverse field by field.



Forward still-field playback



Reverse still-field playback

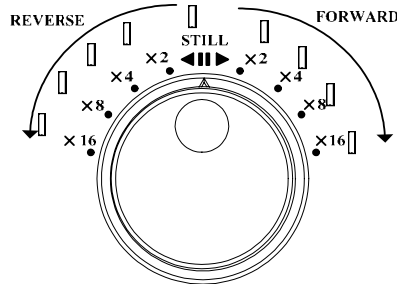


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#### 4) Adjusting Playback Speed

##### a) SHUTTLE ring;

The SHUTTLE ring can be used to adjust the playback speed. Playback speed will vary according to how far the SHUTTLE ring is turned.



- |   |   |
|---|---|
| <input type="checkbox"/> Reverse speed search (16X speed) | <input type="checkbox"/> Forward speed search (2X speed)  |
| <input type="checkbox"/> Reverse speed search (8X speed)  | <input type="checkbox"/> Forward speed search (4X speed)  |
| <input type="checkbox"/> Reverse speed search (4X speed)  | <input type="checkbox"/> Forward speed search (8X speed)  |
| <input type="checkbox"/> Reverse speed search (2X speed)  | <input type="checkbox"/> Forward speed search (16X speed) |
| <input type="checkbox"/> Regular or still-field playback  |   |

##### b) Remote Controller

Playback speed will vary by pressing the fast forward button (▶▶) or the fast reverse button (◀◀).



##### c) SHUTTLE HOLD

Rotate the SHUTTLE ring to the desired search speed, and then press the SHUTTLE HOLD button while holding the SHUTTLE ring at the selected search speed. Search speed will be maintained even when the SHUTTLE ring is returned to its original position.

d) To resume playback while forward or reverse speed search press the PLAY button.

#### 5) Audio playback (AUDIO-PB)

a) Image recording varies as capture rate set. However, audio is recorded in real-time always. Therefore, in playback mode audio may not be played properly depending on recorded field rate.

b) While playback press the AUDIO-PB button to synchronize the sound track with the scenes.

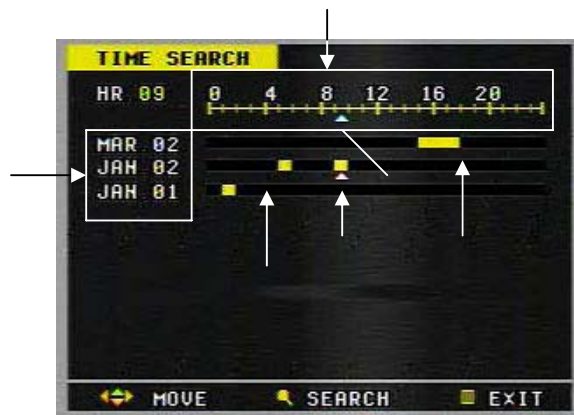
**<Note>** The audio playback may not be performed properly in the real-time recording & real-time playback mode.

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## 10.TIME SEARCH – Time and Date Search

**<Note>** If an external USB HDD is connected to the DVR, choose which HDD you want to search on the SYSTEM SET menu (→ BACKUP SET → PLAYBACK DISK → Internal HDD or External HDD)

1) Press the TIME SEARCH button to display the TIME SEARCH menu.



- Hours in 24 hour mode (0 ~ 24)
  - Month and Date where recorded data file exists.
  - The colored bar displays recorded data.
  - The Black/Blank bar displays no recorded data.
  - Press the ◀, ▶ buttons to move the cursor to indicate time zone you wish to search.
  - Press the ▲, ▼ buttons to move the cursor to indicate month and date you wish to search.
- 2) Each page displays up to 10 days. To go to the previous or next pages press the ▲, ▼ buttons or turn the JOG dial.
- 3) Press the TIME SEARCH (T-SEARCH) button again to search when the cursor is reached to desired time and date.

**<Note>** Time search will not be activated if the cursor is placed at black areas.

4) Then, on the next screen time files and Cameras are listed in a minute mode.



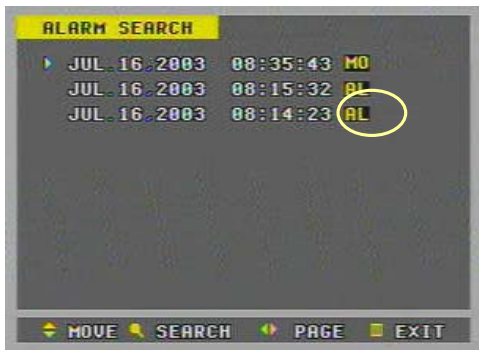
<Cf.16CH> Using ▼ buttons to move next page.

- 5) Place the cursor to the desired time you wish to play back using the ▲, ▼, ◀, ▶ buttons and then, press the PLAY or TIME SEARCH button to play back.

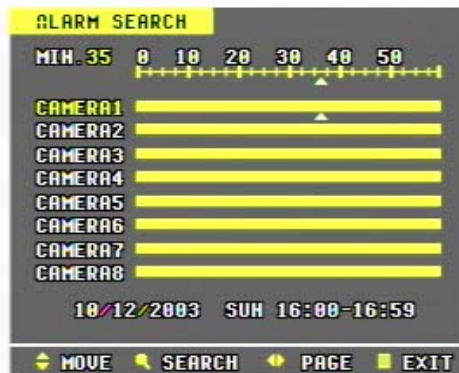
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## 11. ALARM / MOTION – Alarm List Search

- 1) Press the **ALARM SEARCH (A-SEARCH)** button to display the alarm-recording list. (**'AL'** means Alarm and **'MO'** means Motion).

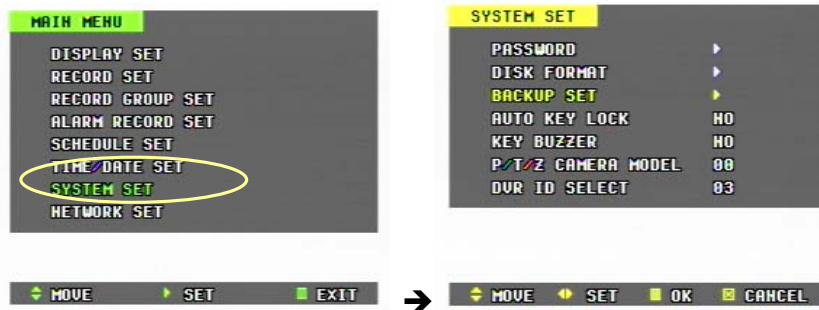


- 2) Press the ▲, ▼ buttons or turn the JOG dial to move the cursor to the desired alarm-recording file.
- 3) Each page displays up to 10-alarm list. To go to the previous or next pages press the □□ buttons or turn the JOG dial
- 4) Press the **ALARM SEARCH (A-SEARCH)** button again to search which channel is Alarm/ Motion detected.
- 5) Then, on the next screen time files and Cameras are listed in a minute mode.



- 6) Alarm / Motion detected channels are turned to YELLOW Color
- 7) Press the **PLAY** or **ALARM SEARCH (A-SEARCH)** button to play back.

## 12. SYSTEM SET



- 1) Press the MENU button or SHUTTLE HOLD button to display the **MAIN MENU**. And then, go to the **SYSTEM SET** using ▲▼ buttons or the JOG dial.
- 2) Press the ► button or turn the SHUTTLE ring to the right while the **SYSTEM SET** flashes. The **SYSTEM SET** sub-menu appears.

ITEM	DEFAULT	ADJUSTMENT
PASSWORD	000000	<p>– Changing the password</p> <p>a) Press the ► button or turn the SHUTTLE ring to the right while the PASSWORD flashes. Then the CURRENT PASSWORD setting appears. Enter your current password using numeric buttons from 0 to 9.</p> <div style="text-align: center; border: 1px solid gray; padding: 5px; width: fit-content; margin: 10px auto;">CURRENT PASSWORD: * * * * *</div> <p>b) Enter the new password using the numeric buttons from 0 to 9.</p> <div style="text-align: center; border: 1px solid gray; padding: 5px; width: fit-content; margin: 10px auto;">NEW PASSWORD : * * * * *</div> <p>c) Enter the new password to confirm. Then the password is changed.</p> <div style="text-align: center; border: 1px solid gray; padding: 5px; width: fit-content; margin: 10px auto;">CONFIRM PASSWORD: * * * * *</div>
DISK FORMAT	-	<p>– Formatting internal HDD</p> <p>a) Press the ► button or turn the SHUTTLE ring to the right while the DISK FORMAT flashes. Then, “DO YOU REALLY WANT TO FORMAT?” message appears.</p> <div style="text-align: center; border: 1px solid gray; padding: 5px; width: fit-content; margin: 10px auto;">DO YOU REALLY WANT TO CONTINUE?</div> <p>b) Press the MENU button to format the disk. Press the CLEAR button to cancel.</p>

**\*\*Important:** If you wish to format the HDD while recording, please follow the steps below.

1. Stop the DVR completely and power off.
2. Restart the unit.
3. Format the HDD on the SYSETM SET menu.
4. After that, restart the unit again.

Then, HDD formatting is completed.

### 3) BACKUP SET



ITEM	DEFAULT	ADJUSTMENT
USB DISK FORMAT	-	<p>Formatting external back up device.</p> <p><b>&lt;*Exactly same procedures as formatting of internal HDD&gt;</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Press the ► button or turn the SHUTTLE ring to the right while the USB DISK FORMAT flashes.</li> <li><input type="checkbox"/> Then, “DO YOU REALLY WANT TO FORMAT?” Message appears.</li> </ul> <div style="border: 1px solid black; padding: 5px; text-align: center; margin: 10px 0;"> <p>DO YOU REALLY WANT TO CONTINUE?</p> </div> <ul style="list-style-type: none"> <li><input type="checkbox"/> Press the MENU button to format the disk. Press the CLEAR button to cancel.</li> </ul> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p><b>**Important:</b> If you wish to format the USB DISK while using, please follow the steps below.</p> <ol style="list-style-type: none"> <li>1. Stop the DVR completely and power off.</li> <li>2. Restart the unit.</li> <li>3. Format the USB DISK on the SYSETM SET menu.</li> <li>4. After that, restart the unit again.</li> </ol> </div> <ul style="list-style-type: none"> <li><input type="checkbox"/> Then, HDD formatting is completed.</li> </ul>

**Note:** This menu will not be selected if there is no external USB device connected.

ITEM	DEFAULT	ADJUTMENT
BACK UP MODE	MANUAL	- MANUAL: The recorded data within a certain time range can be backed up to the peripheral storage only when the BACKUP button is pressed. - AUTO: Backups of previously recorded data are made at the same time the DVR is recording new data.
PLAY BACK DISK.	INTERNAL	Choose which HDD you want to search and playback when an external USB device is connected. <b>INTERNAL ↔ EXTERNAL</b>

#### 4) AUTO KEY LOCK

**YES:** All key buttons are locked automatically if there is no button pressed in 3 minute.

**NO:** disables the Auto Key Lock function.

**<Note>** In the case of entering Main Menu and RECORD STOP, it automatically locked even though you choose "NO" for Auto Lock

#### 5) KEY BUZZER

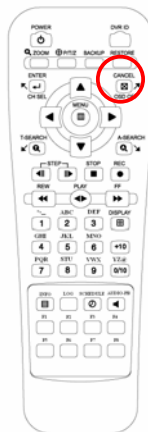
**YES:** Whenever any button is pressed there is a beep sound shortly.

**NO:** disables the KEY BUZZER function.

#### 6) DVR ID SELECT

a. Select DVR ID Number (Default 01) on System Menu

b. Change the DVR ID of IR Remote with pressing DVR ID button at the same time.



#### 7) PAN/TILT/ZOOM model number

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Enter the PAN/TILT/ZOOM camera ID connected currently (00~99)

**<ID List>**

<b>ID No</b>	<b>Manufacturer</b>	<b>Model Name</b>
00	C&B Tech	CNB-PTZ102
01	Merit Lilin Ent	PIH-7000/7600
02	VCL	Orbiter Microsphere
03	SAMSUNG	SCC641
04	NEC	NC-21D
05	SUNKWANG	SK2107
06		
07	WONWOO	PT-101
08	LPT A100 (LG)	P/T/Z
09	HONEYWELL	GC-655N
10		
11	PELCO	D-PROTICAL: 2400 bps
12	PELCO	D-PROTICAL: 4800 bps
13	PELCO	D-PROTICAL: 9600 bps
14		
15	CANON	VC-C4
16	PELCO	PROTOCOL :2400bps
17	PELCO	PROTOCOL :4800bps
18	PELCO	PROTOCOL :9600bps
19	SECURETEK	PTZ-018WC & PTZ-023WC
20		Expended PELCO :4800bps
21		Expended PELCO:9600bps
22	Panasonic	WV-CS/W85x, WV-CS86x

### 13. NETWORK SET

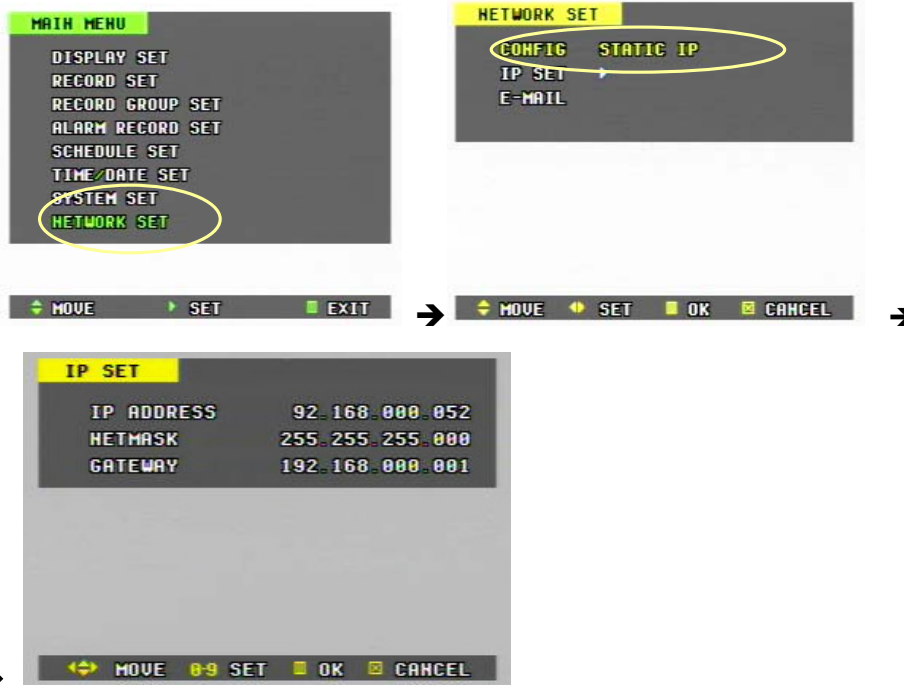
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## 1) LAN CONNECT

-Connect LAN Cable to Ethernet Port on the Rear.



## 2) Set UP IP Address –Static IP



- Press the **MENU** button or **SHUTTLE HOLD** button to display the **MAIN MENU**. And then, go to the **NETWORK SET** using **▲▼** buttons or the JOG dial.
- Press the **▶** button or turn the **SHUTTLE** ring to the right while the **NETWORK SET** flashes. The **NETWORK SET** sub-menu appears.
- Press the **▲ ▼** buttons or turn the JOG dial to move to the desired item, and then press the **Numeric buttons** to set the **IP ADDRESS**, **NETMASK** and **GATEWAY**.
- To complete the setting and exit, press **MENU** button or **SHUTTLE HOLD** button.

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### 3) E-Mail Transfer.

Press the **Numeric button** to type e-mail address to send Alarm Message.

No	1 <sup>st</sup> Press	2 <sup>nd</sup> Press	3 <sup>rd</sup> Press
1	-	.	-
2	A	B	C
3	D	E	F
4	G	H	I
5	J	K	L
6	M	N	O
7	P	Q	R
8	S	T	U
9	V	W	X
0/10	Y	Z	@

## 14. Information & Log List

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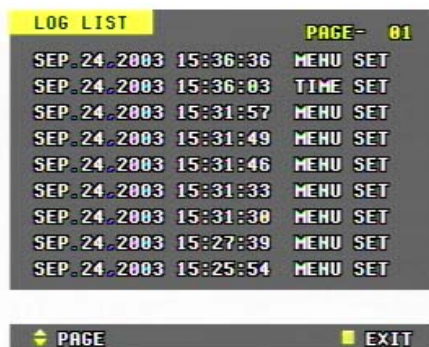
## 1) Information

- a) Press the INFO button on the front panel of unit or on the remote controller to display.



- b) It shows current recording information.  
c) To exit press the MENU button.

## 2) LOG LIST



- a) Press the LOG button on the front panel of unit or on the remote controller to display (Press the INFO button twice to display the log list).  
b) It displays up to 99 pages and each page displays up to 10 lists.  
To show the previous or next pages press the ▲, ▼ buttons.  
c) Press the MENU button to exit.

---

## 15. ZOOM

- 1) Press the **ZOOM** button to display the Zoom Area Box.



- 2) Move the box to the desired position using the ▲, ▼, ◀ and ▶ buttons.
- 3) Press the **ZOOM** button to enlarge the desired area.
- 4) Press the **CLEAR** button to exit.

**<Note>** The ZOOM button is not activated when a menu is displayed on the screen and multi display mode.

## 16. PAN/TILT/ZOOM Camera control

- 1) After connection of P/T/Z cameras, press the P/T/Z button on the front panel or the remote controller. Then, P/TZ control mode appears as the picture below <Picture1>.



**<Picture1>** Manual Pan/Tilt/Zoom control mode. **<Picture2>** Auto Pan/Tilt/Zoom control mode.

- 2) **PAN** control: Press ◀ or ▶ button on the front panel or the remote controller.  
**TILT** control: Press ▲ or ▼ button on the front panel or the remote controller.  
**ZOOM** control: Press the **REW** button to zoom out or the **FF** button to zoom in.  
**MENU** button: Press to exit the mode.

- 3) Press PTZ button again, go to Auto Control <Picture2>.

## 17. External Backup Device control (USB DISK type)

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### A. Auto external device detection.

- 1) Connect an external backup device to the DVR while DVR is in 'STOP' mode.
- 2) The DVR unit detects the external backup device automatically within 15 sec and the external backup device icon appears on the monitor screen.



### B. Backing up data (AUTO or MANUAL mode)

- 1) When the **BACKUP** mode on the **SYSTEM SET** menu is set as **AUTO**;  
Press the BACKUP button on the front panel or remote controller, then, an arrow (▶), **direction to the right**, appears and the unit starts backing up to the external device from the beginning of the HDD



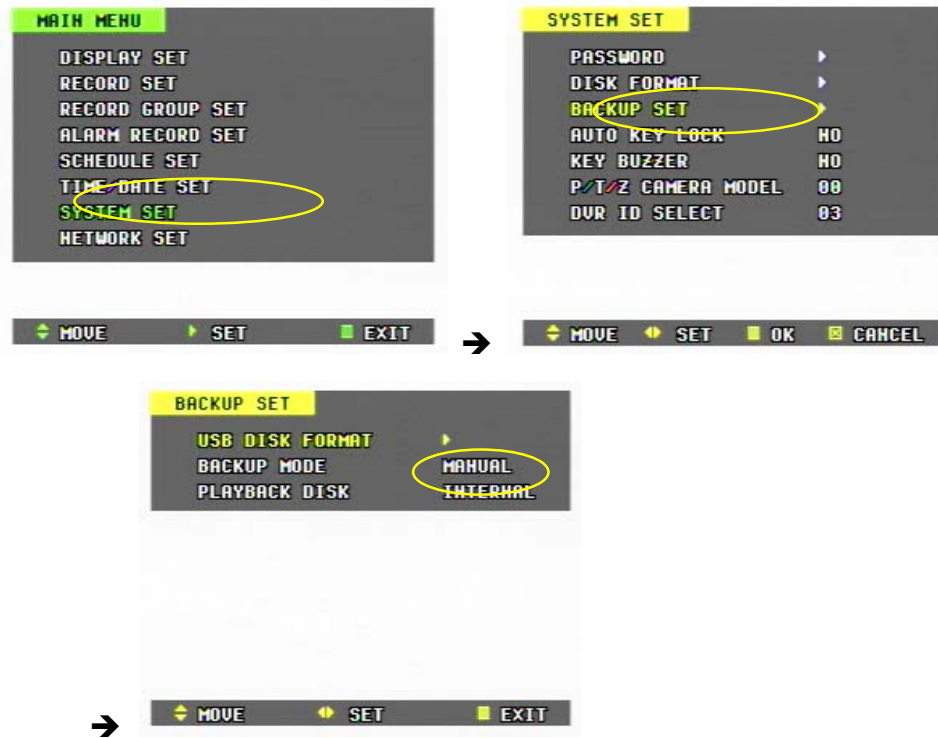
- 2) To stop backing up, press the BACKUP button again. Then, the arrow (▶) starts flashing while the archiving process is halted. The arrow (▶) goes off at the end of the process, and the next backup recording will begin at this point.
- 3) When the **BACKUP** mode on the **SYSTEM SET** menu is set as **MANUAL**; Press the BACKUP button, then the BACKUP TIME SET mode appears as picture below.



- 4) Now, set the starting and ending times. Within the time range, there should be recorded data exist in the main hard disk drive.
- 5) Press the BACKUP button after the setting. Then, the arrow (▶) appears and backup recording within the time range is started.

### C. When a CD-RW/DVD("-"Type) is connected.

- 1) Set the BACK UP mode as **MANUAL** on the SYSTEM SET menu.



- 2) Exit the menu.
- 3) Press the BACKUP button, then the BACKUP TIME SET mode appears as picture below.

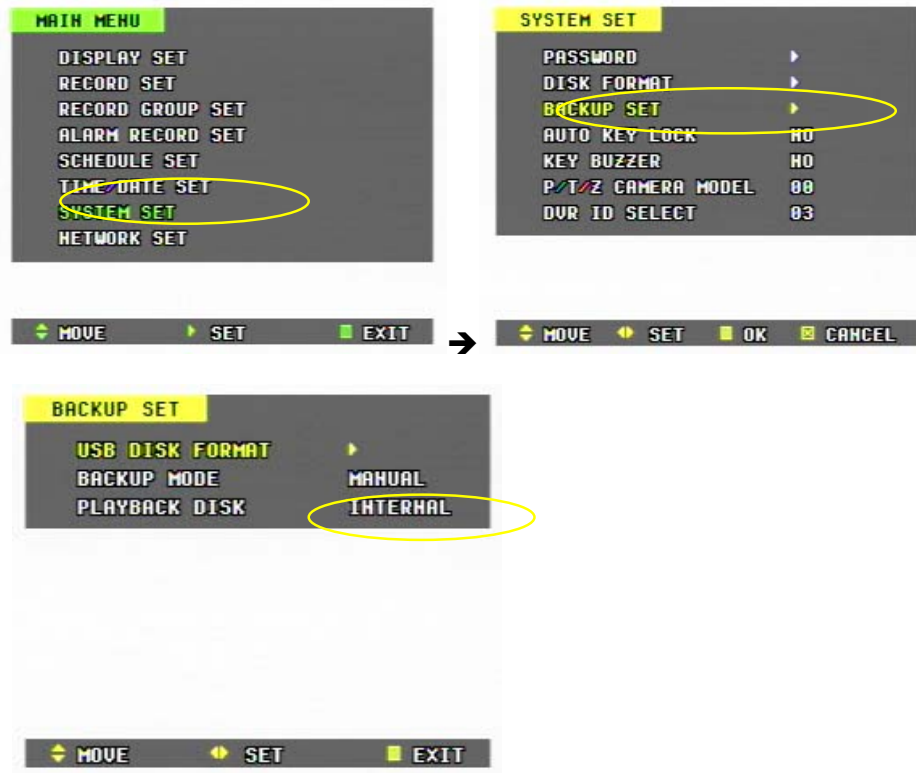


- 4) Now, set the starting and ending times. The ending time must not be before the starting time or the same as the starting time. It must be any time over the starting time.
- 5) Press the BACKUP button after the setting. Then, the DVR detects the size of CD/DVD and starts to copy with an arrow (▶) appearing. The arrow (▶) goes off after back up.

**Note:** It is saved as "image" file format.

#### D. Backup Search (Time-Search, Alarm-Search, Playback)

- When an External USB HDD is connected.



- 1) Press the **MENU** button and go to the **SYSTEM SET** menu.
- 2) Then, go to the '**BACK UP SET**'.
- 3) Select as **EXTERANAL** on the **PLAYBACK DISK** menu.
- 4) Press the **MENU** button to exit the menu.
- 5) After that, the external **USB** DISK can be controlled just as the internal HDD. (Time Search, Alarm Search, Playback)

**Disclaimer:** USB devices from some manufacturers may be incompatible.  
Please contact the technical support before purchasing a back up device.

## CLINET PROGRAM

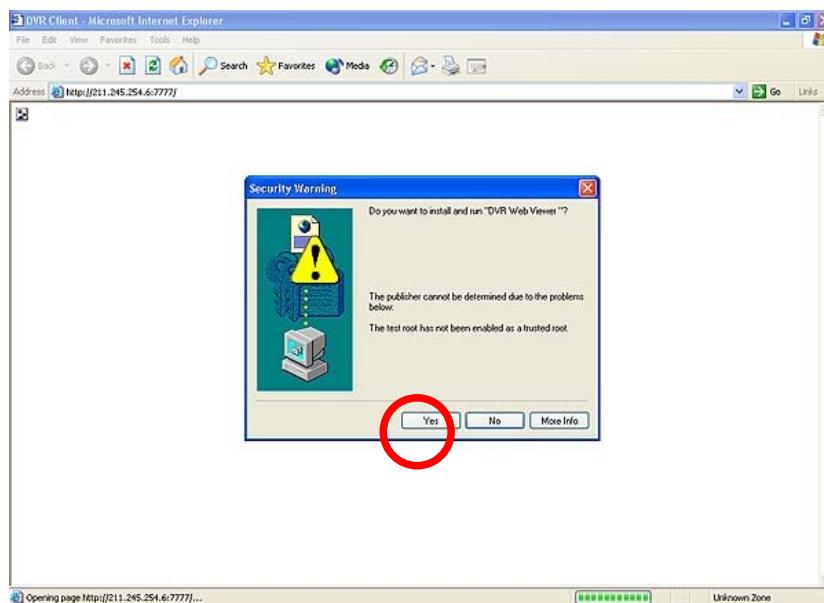
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## 1. How to install and connect

(1) Installation– it is automatically downloaded when you access to DVR.

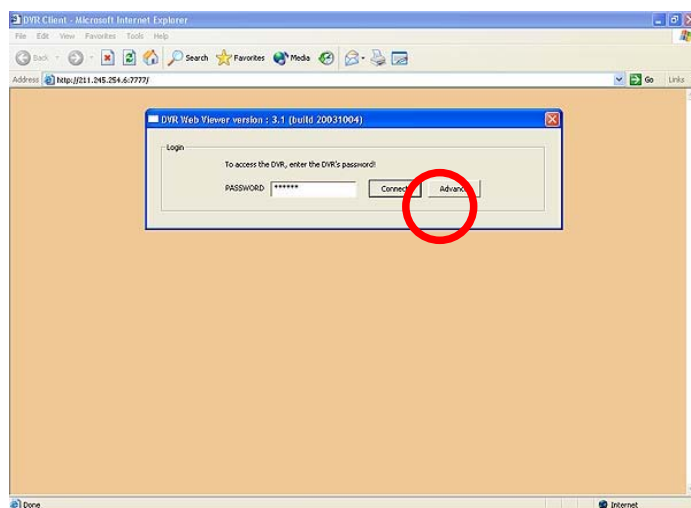
A. Enter the DVR IP address. Then 'ActiveX control' window appears.

Click 'Yes'. - or the Client S/W can be installed with the CD enclosed.



B. 'ActiveX control' is installed and connection window appears.

C. Enter the password of DVR and click the 'Connect' button.

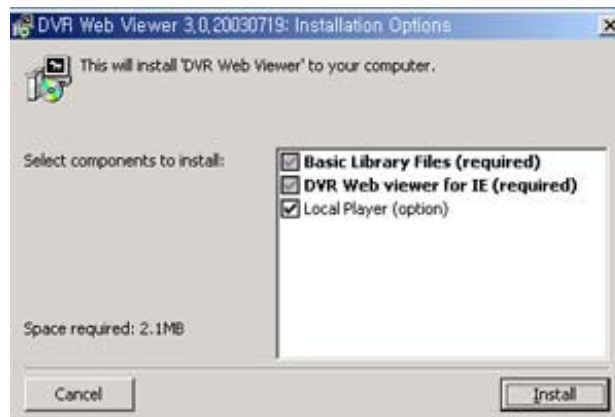


(2) Installation By CD.

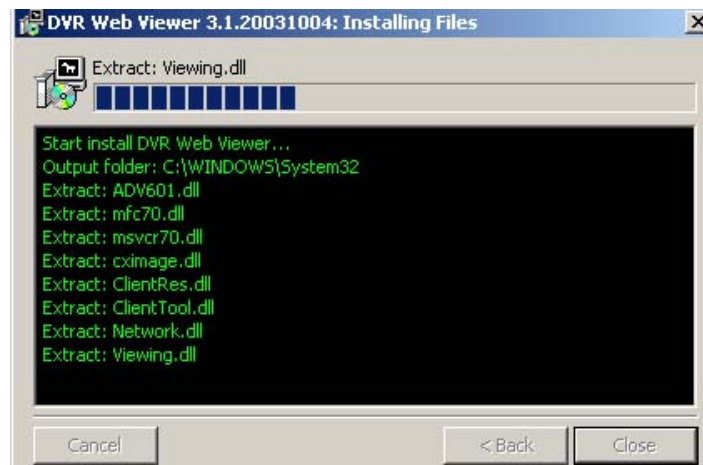
- 
- A. Insert “**Network Software CD**” to CD-ROM of your PC and Find “SETUP.EXE”  
B. Double Click “SETUP. EXE”



- C. Click “Install”



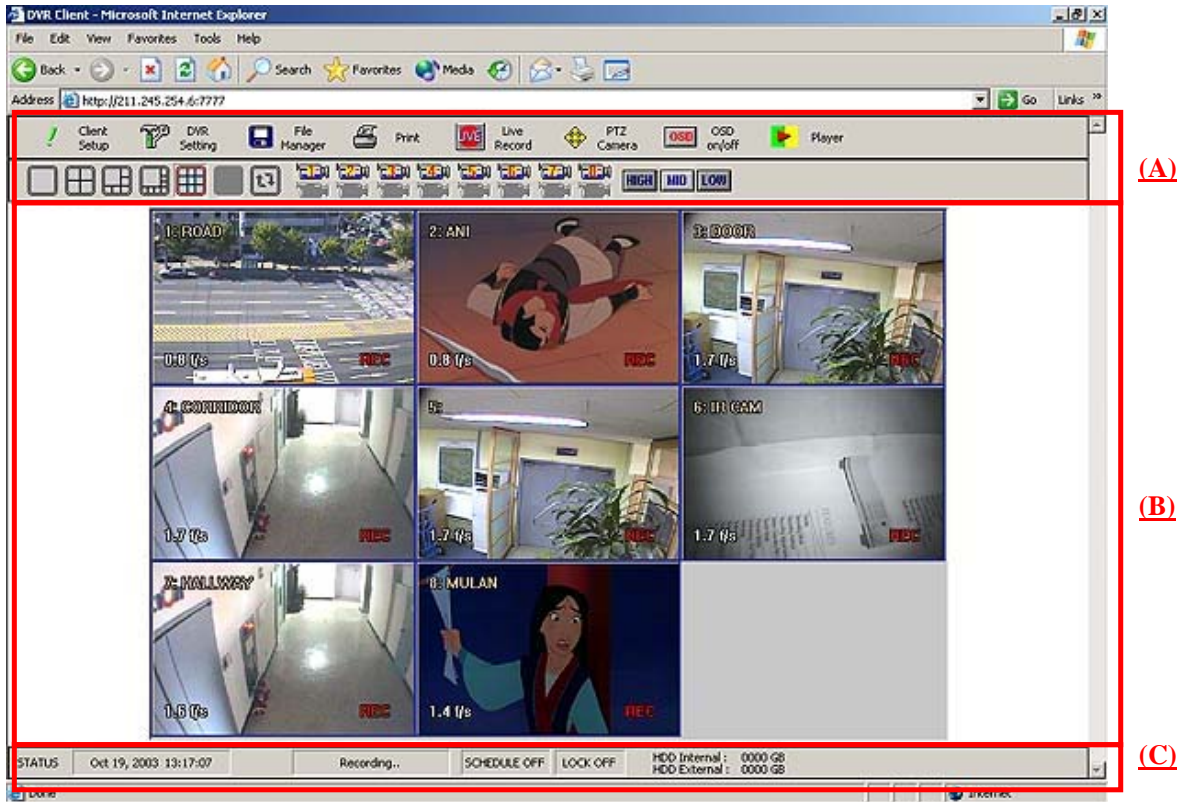
- D. Click Close Button after below images appears.



- E. The ICON  of DVR LOCAL PLAYER will be displayed on your PC.

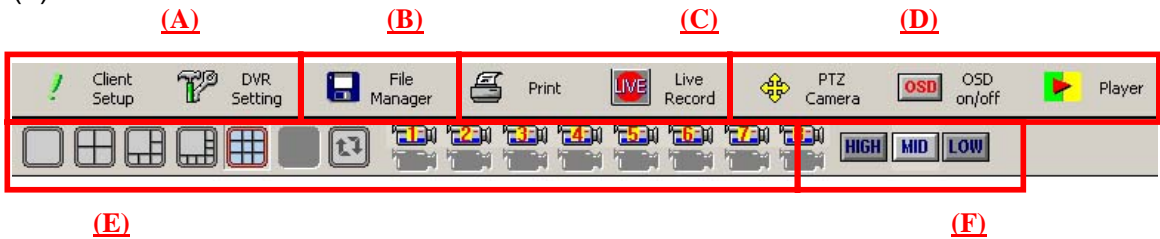
## 2. Features

(1) Main Screen



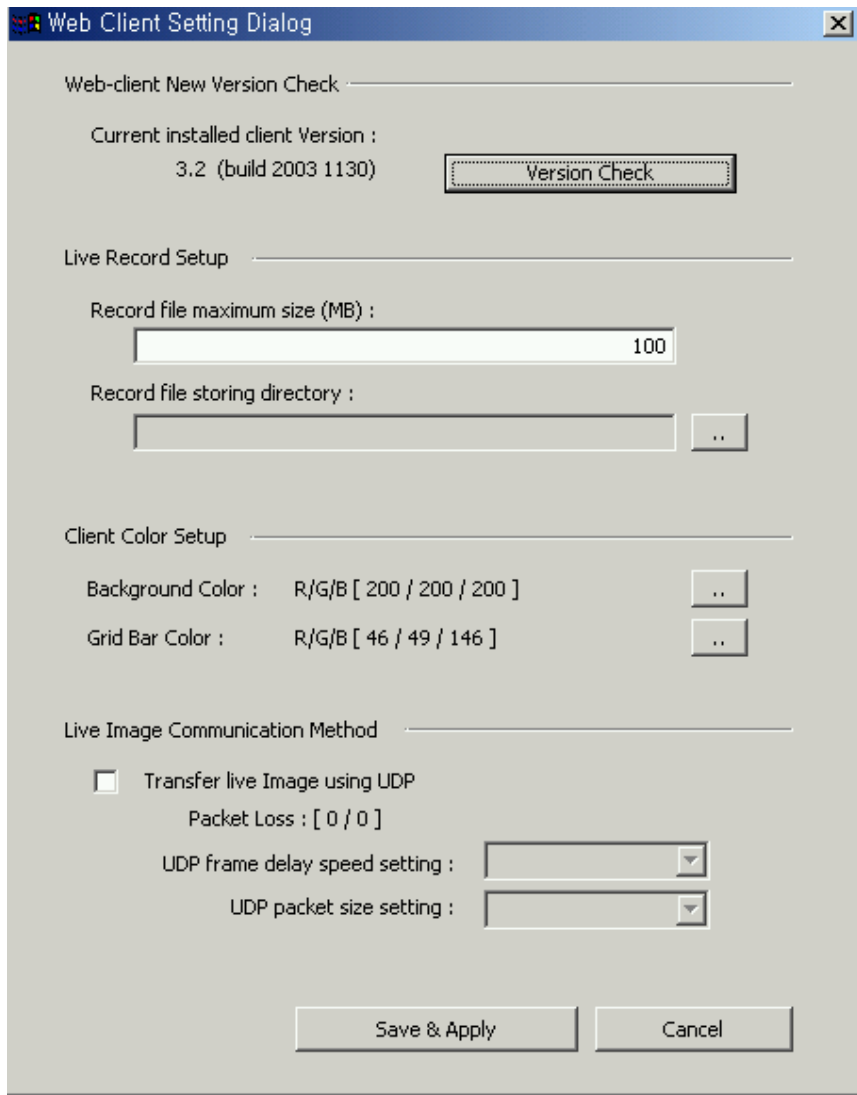
- (A): Tool bar - control buttons
- (B): Main View – Live.
- (C): Current DVR Status.

(2) Tool Bar




- ◆ (A)
- Web Client Setup:



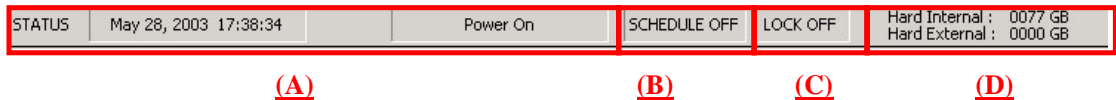


- 1) Web Client Version Check
- 2) Live Record Set up: Select Live Record file Size and Save Location
- 3) Client Color Set up: Select prefer color.
- 4) Live image Communication Method: Select this, if you need to use UDP instead of TCP

- DVR Setting: Click to change the DVR setting.
- ◆ (B) File Manager: Click to down load the image files from the DVR.  
(See page 54 for reference)
- ◆ (C)
  - PRINT: Click to print the current still image.

- Live Record: Click to record the current live images.
- ◆ (D)
  - PTZ Camera : PAN/ TILT/ZOOM control button.
  - PLAYER: Local player; click to playback the downloaded image files from the DVR server.
  - OSD ON/ OFF: OSD(On Screen Display on /off)
- ◆ (E) Camera Display buttons
  - Multi View: Click to view in different view mode.
  -  1 ~ 4(8,16) : Click to zoom in each camera.
- ◆ (F) Selection of LIVE Picture Quality.
  - HIGH: 720 x 486
  - MID: 360 x 243
  - LOW: 180 x 122

(3) Status Bar



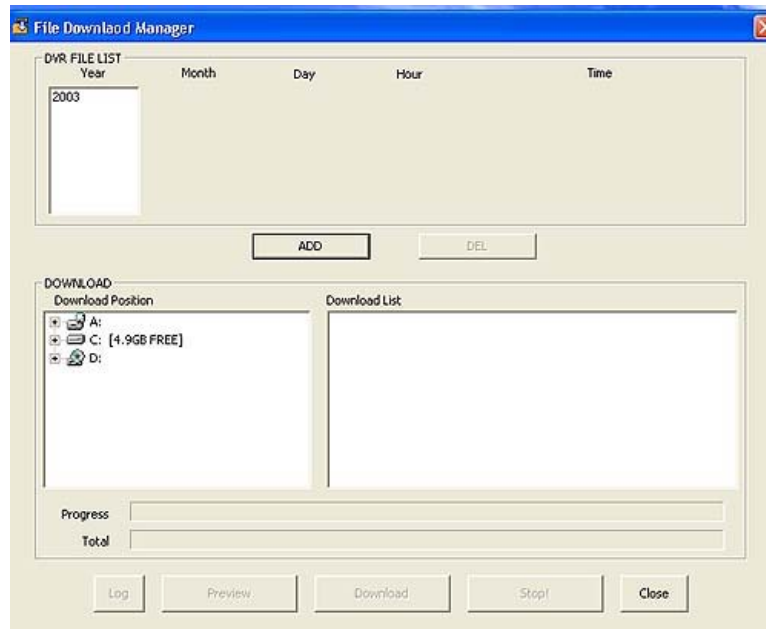
- ◆ (A): Current DVR Status (Time and Date, Power On / REC / PLAY / STOP / etc..)
- ◆ (B): SCHEDULE Recording ON/OFF status
- ◆ (C): Manual LOCK ON/OFF
- ◆ (D): Remain HDD capacity of internal storage and external storage.

**3. Image file down load from the DVR server.**

(1) Click the 'File Manager' button on the tool bar



(2) Then, File Download manager appears.



(3) Select the year, Month, Day, Hour and time. Then image file list appears.

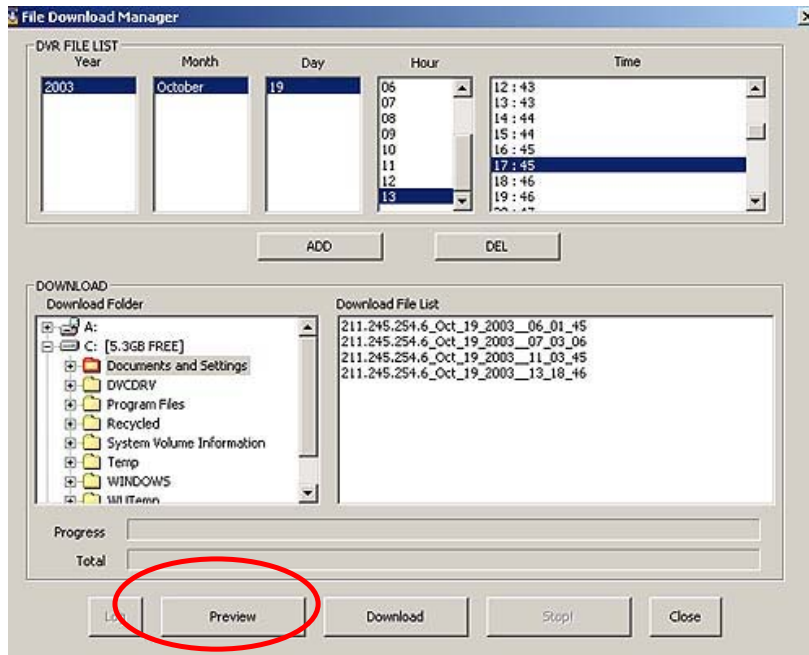
(4) Select one of the files you wish to download.

- ◆ **Preview:** Click to preview the images without downloading. Press Stop button to stop preview.

**Note:** If you stop the playback while previewing, you need to repeat procedures ( 3 ) to preview or download a file.

- ◆ **Download :** Downloading without preview.

(5) Example

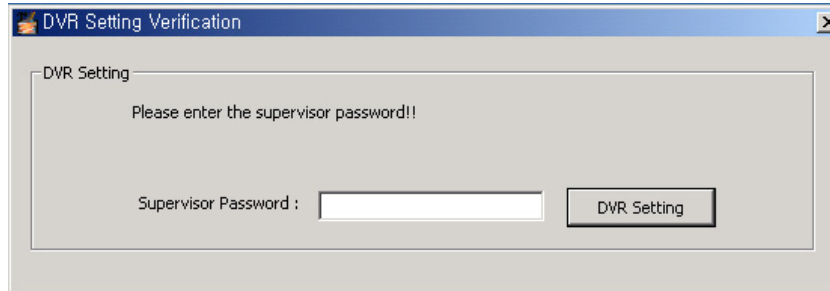


#### 4. DVR Setting

(1) Click the 'SETUP' button on the Tool bar



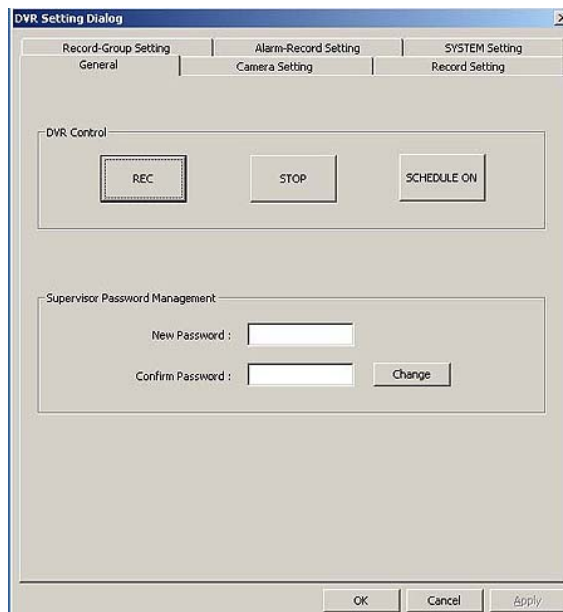
(2) DVR Setting: To change the DVR setting, enter the supervisor password.



**Note:** Password: It is different from the DVR's password. It is a network password for supervisor to allow changing DVR setting from the remote place via network connection. Default :000000

(3) DVR Setting (General)

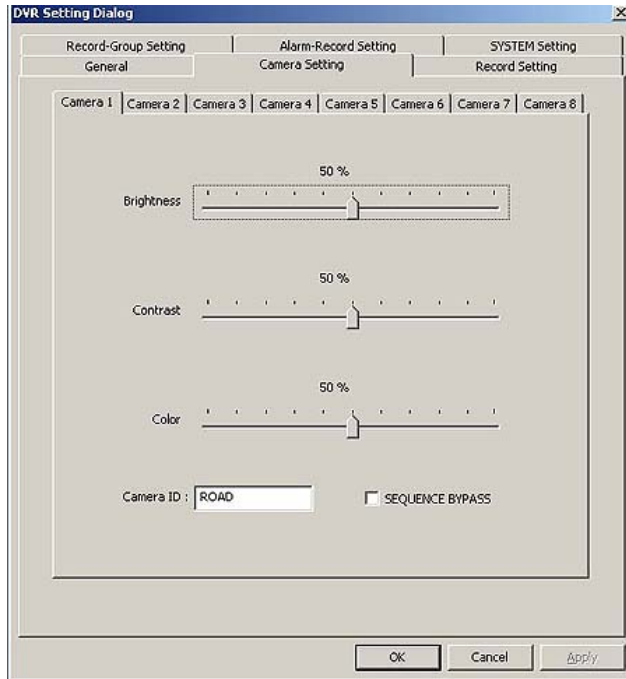
-'DVR Setting Dialog' window appears when you enter the proper password.



- ◆ DVR Control
  - REC: DVR recording ON
  - STOP: DVR recording STOP
  - SCHEDULE ON: Schedule recording ON/OFF
- ◆ Supervisor Password Management (Network password)

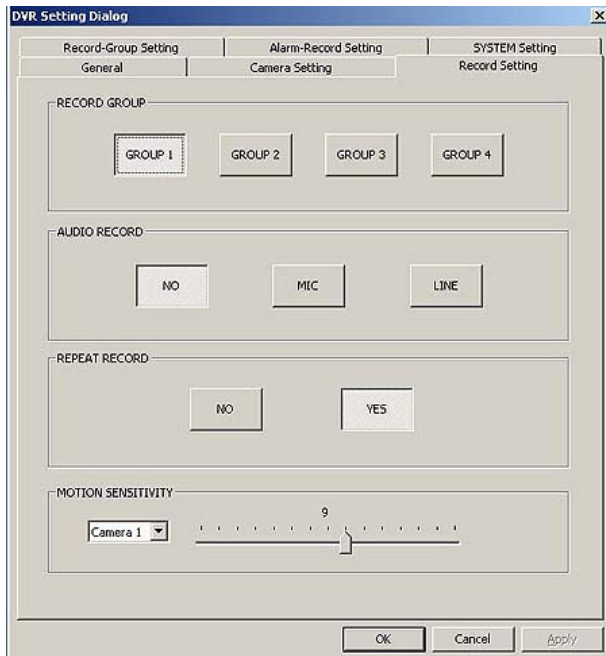
- New Password
- Confirming the New Password

#### (4) DVR SETUP (Camera)



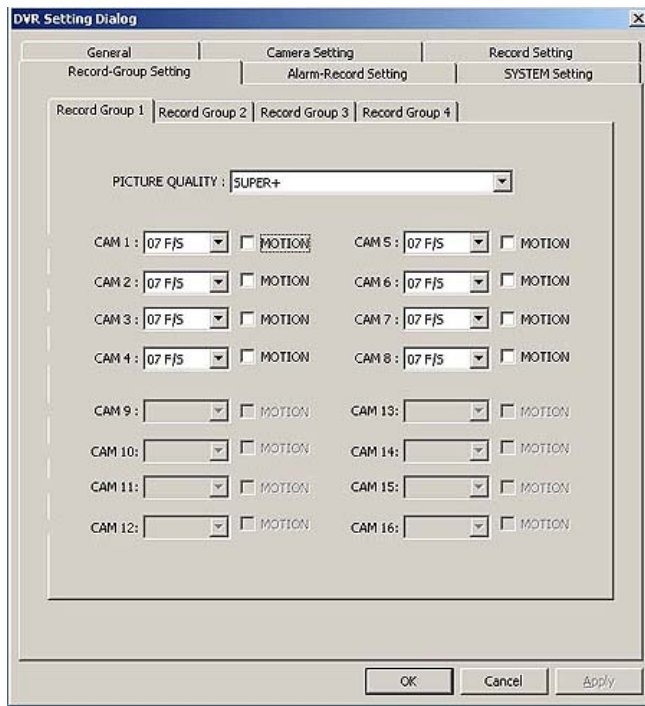
- \* CAM 1 ~ 4/8/16: Camera selection.
- Brightness: 0 ~ 99
- Contrast: 0 ~ 99
- Color : 0 ~ 99
- \* Camera ID : up to 8 characters.

#### (5) DVR SETUP (Record Setting)



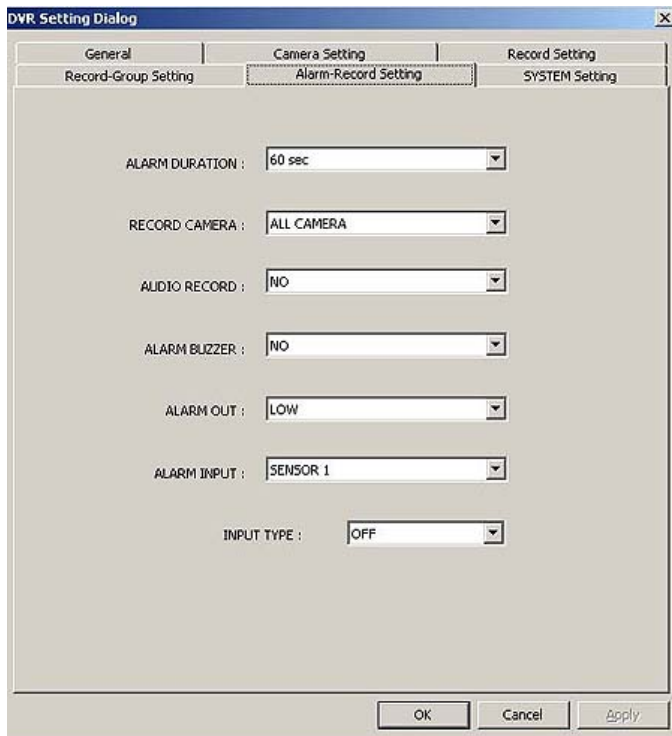
- \* GROUP 1 ~ 4:  
Recording Group selection.
- \* Audio Recording selection
- \* Repeat Recording on / off.
- \* Motion Sensitivity:  
Motion level setting.

#### (6) DVR SETUP (Record-group setting)



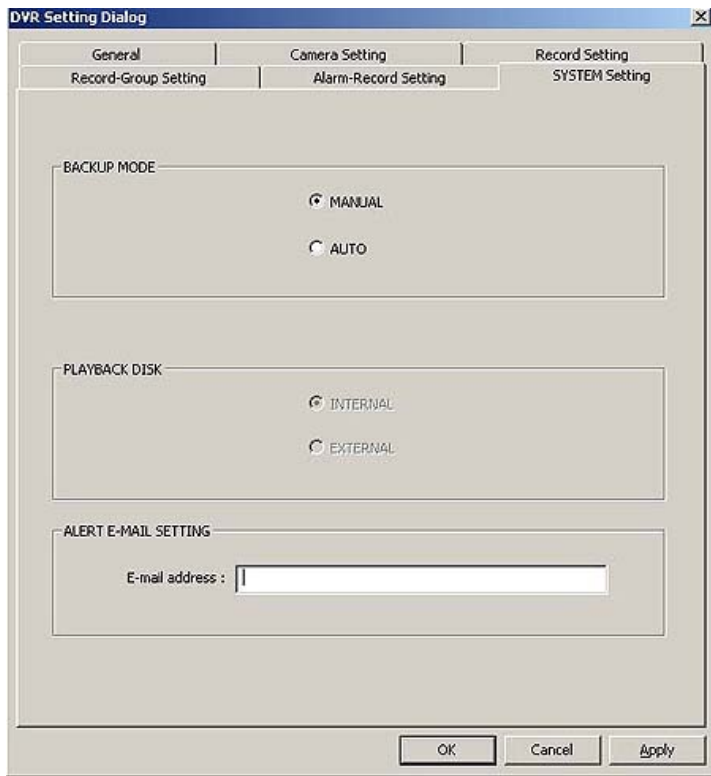
- \* Group selection: 1 – 4
- \* QUALITY: Picture quality
- \* Camera 1 ~4/8/ 16:  
Recording speed of each camera.
- \* Motion detection: ON/OFF

(7) DVR SETUP (alarm-recording setting)



- \* Alarm Duration: 20~240 Sec
- \* RECORD CAMERA
  - All Camera: start recording of all cameras when any of 8/16 alarms triggered.
  - 1:1 Camera: If alarm No.1 is triggered, only camera 1 will be recorded.
- \*AUDIO RECORD: Audio recording on/off
- \*ALARM BUZZER: Alarm buzzer on/off
- \*ALARM OUT : Level
- \* ALARM ONPUT: SELECT
- \* INPUT TYPE : N.O, N.C, OFF

(8) DVR SETUP (System setting)



- \* BACKUP MODE:
- \* Backup mode setting (MANUAL / AUTO)
- \* PLAYBACK DISK: Selection.
- \* ALERT E-mail Setting

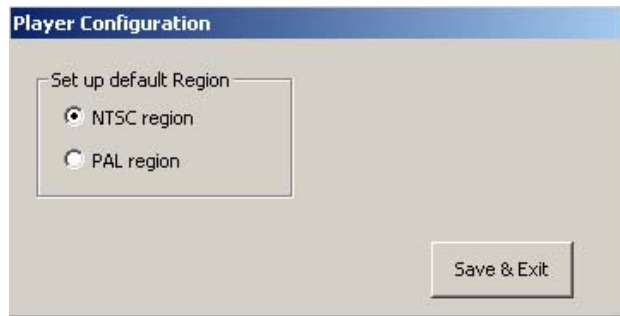
## 5. Local Player

---

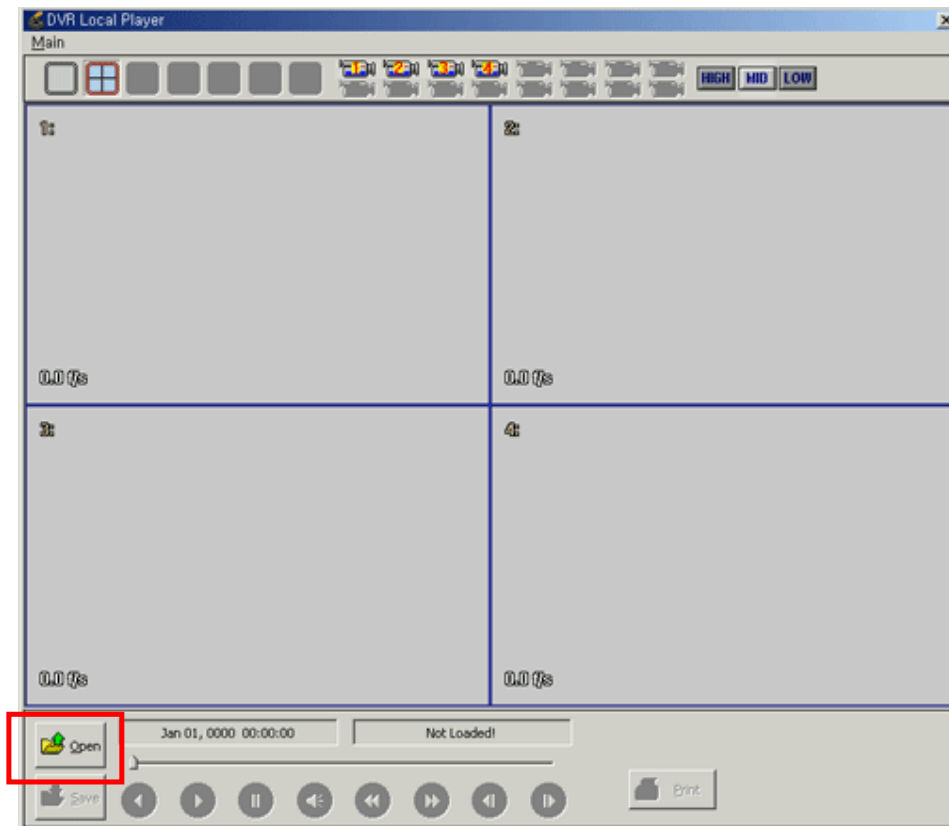
(1) Click the “**Player**” button on the tool bar to open ‘**DVR Player**’ window.



(2) Select Video Type.

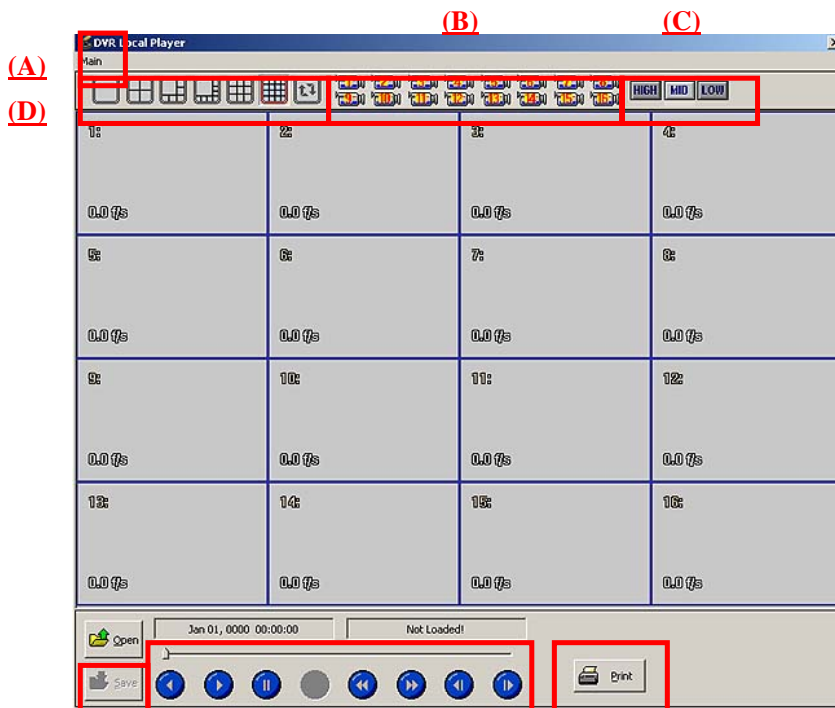
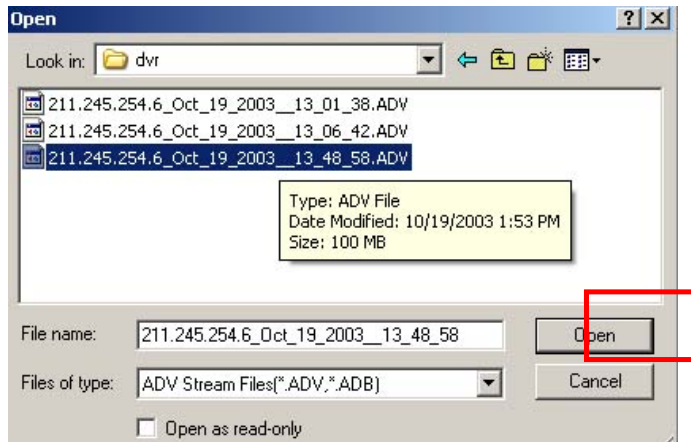


(3) Click the ‘**Open**’ button.



- It automatically detects the Number of Channels when you open the file.

(4) Select an image file (.ADV or .ADB) and click ‘**Open**’ button.



- ◆ (A) MAIN: Open files, Snapshot save, Print, Set Region, Configuration.
- ◆ (B) Camera Selection.
- ◆ (C) Display of Picture quality
- ◆ (D) Display Mode
- ◆ (E) Save a snap image as JPEG., GIF , BMP or PNG

**Note:** It is saved as same as display mode which you are watching.

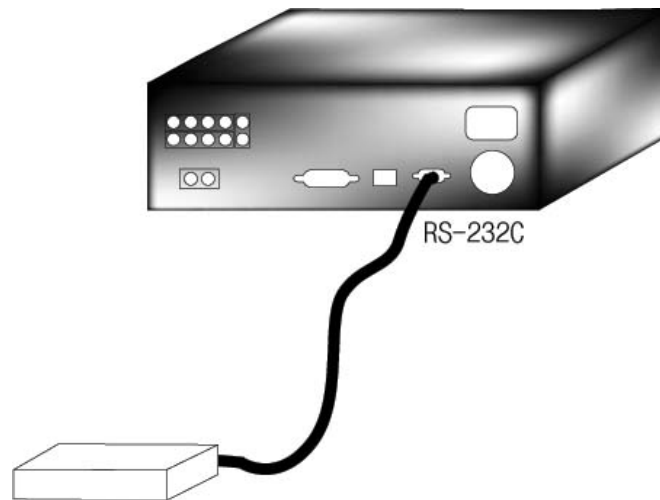
- ◆ (F) Operation Buttons
- ◆ (G) PRINT

## 6. How to connect modem

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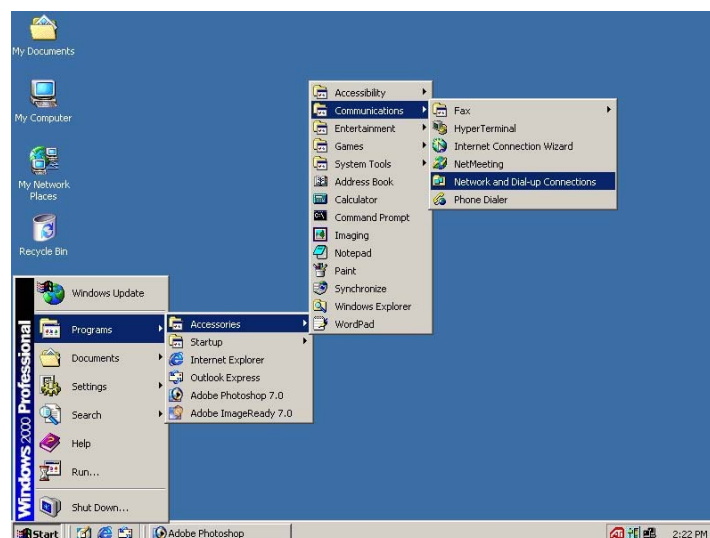
Please follow the next procedure after installed client software. We provide client software in a CD.

1. Connect modem to the back of DVR RS-232C.

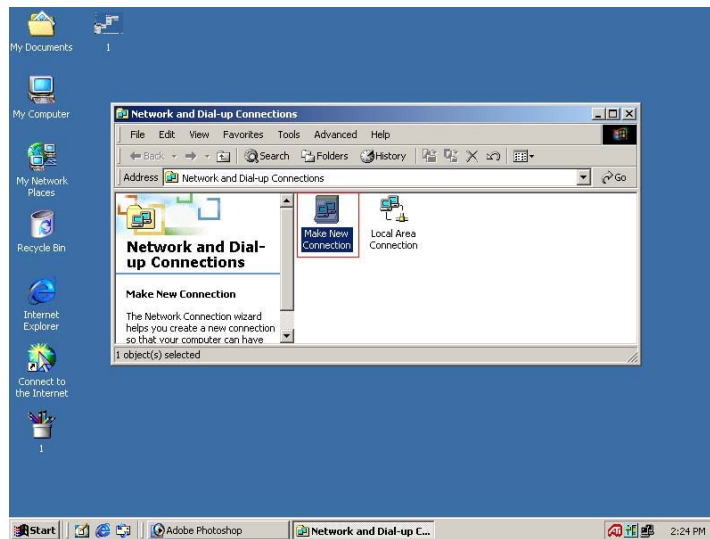


2. Follow the below steps:

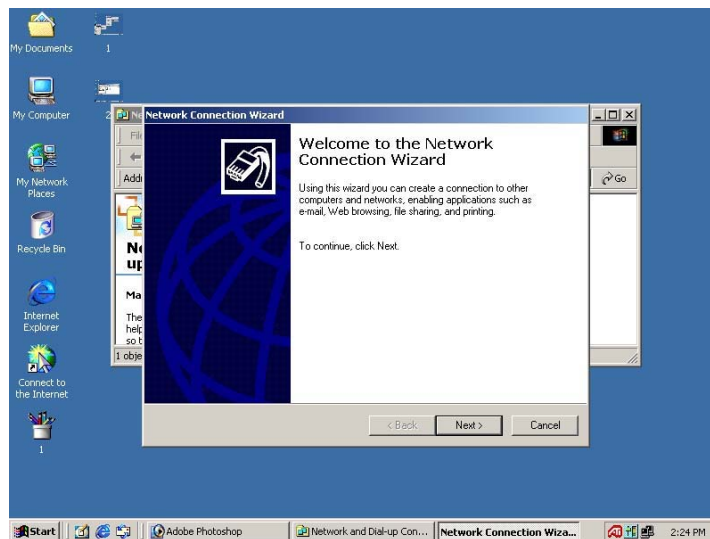
Start → Programs → Accessories → Communications → Network and Dial-up Connections



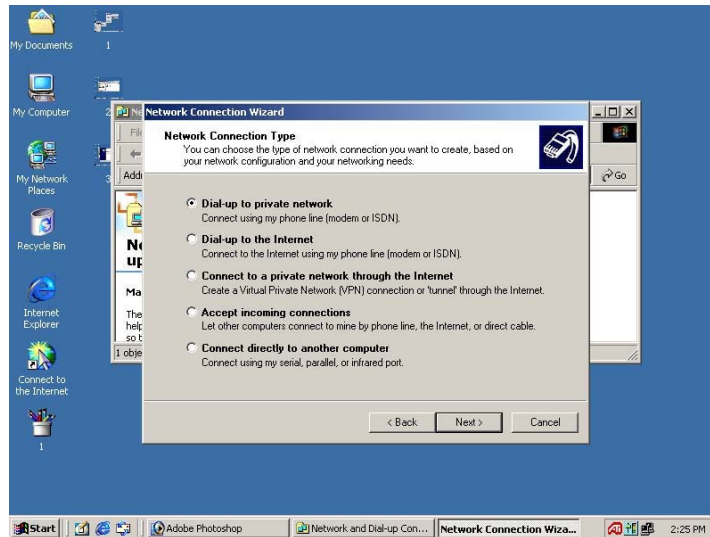
3. Double click “Make New Connection”.



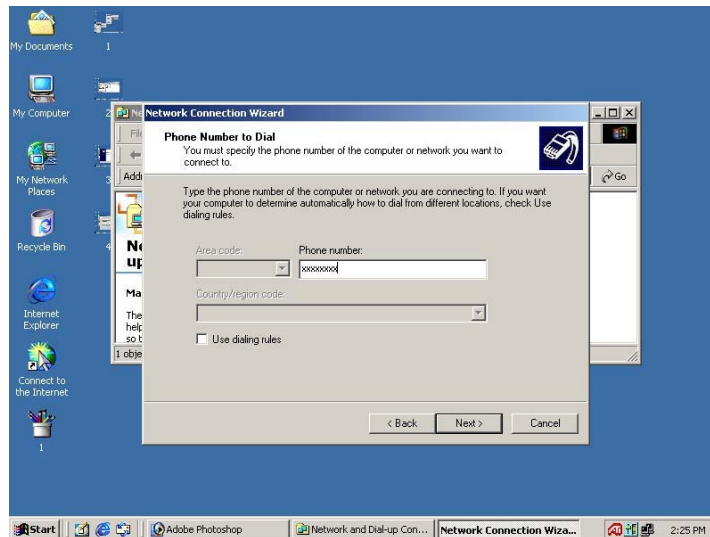
4. Click “Next” at the window of network connection wizard.



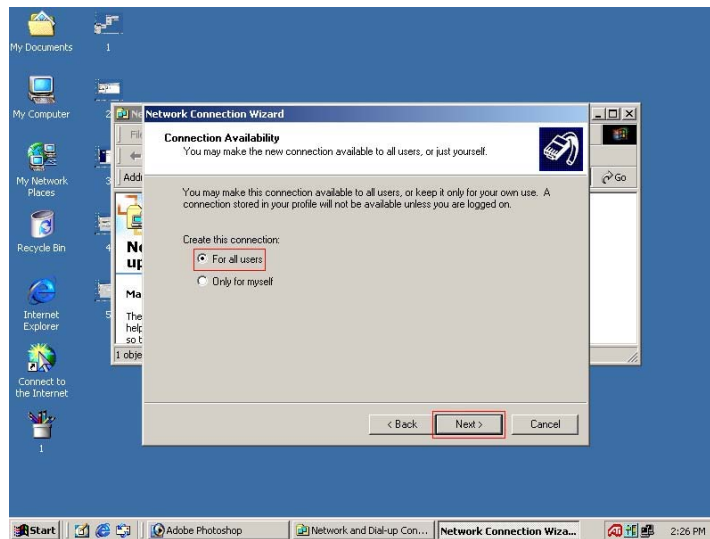
5. Check “Dial-up to private network” and click “Next”.



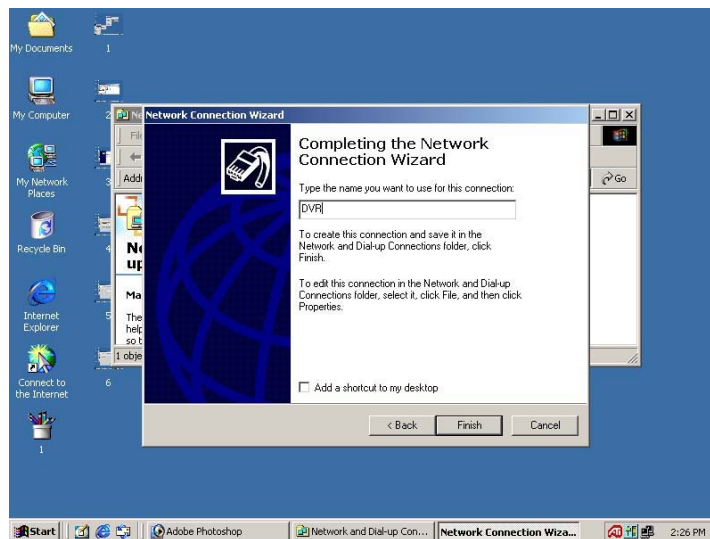
6. Enter the telephone number, which is connected, to the DVR



7. Check “For all user” and click “Next”

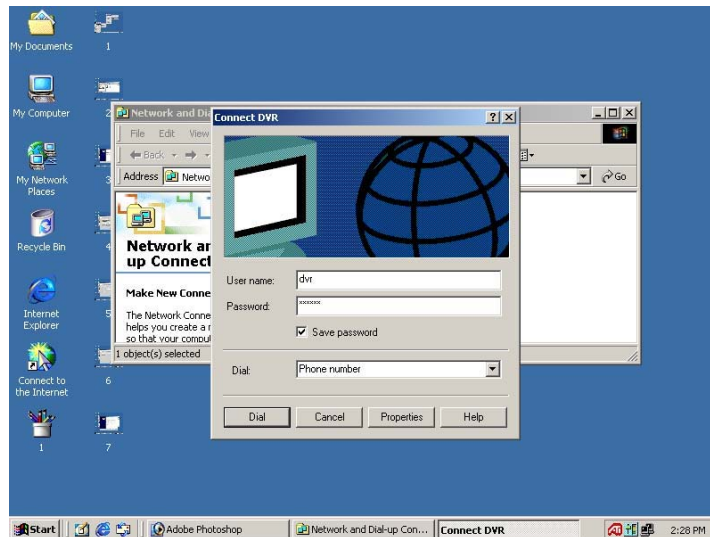


8. Type DVR at the parameter, check “Add a shortcut to my desktop” and click “Finish”

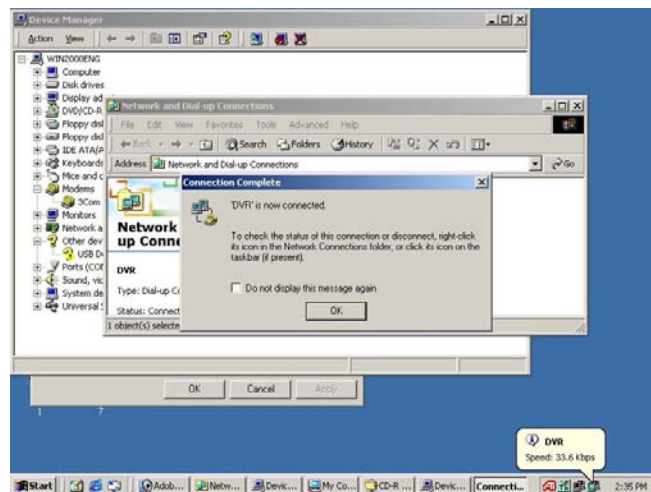


9. Type “dvr” at the user name and enter the password(Six digits 000000 are initial

password) click “Dial”



10. You can find this window if connection is succeed and see the speed of this connection at the bottom tool bar.

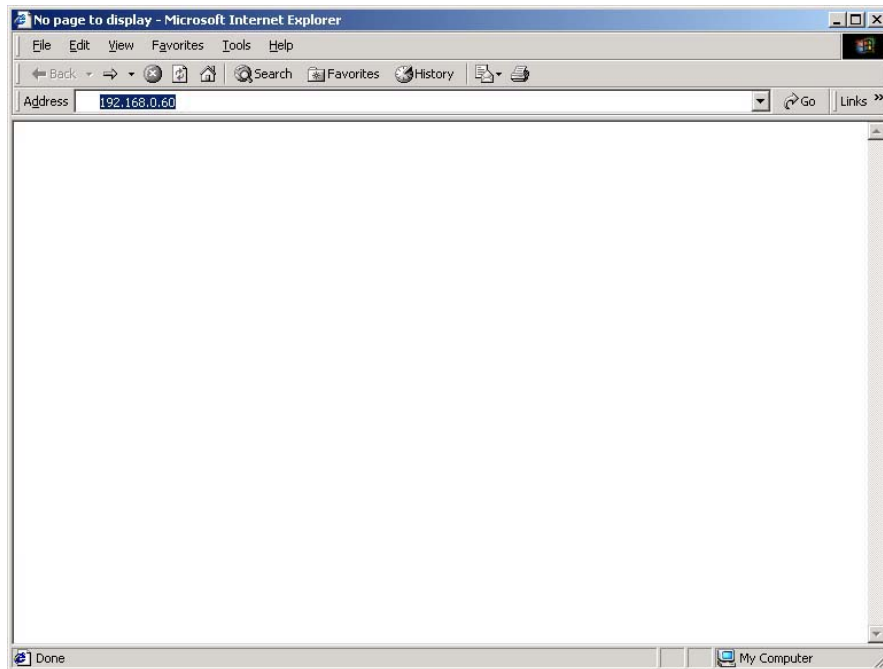


The highest speed of analog modem is 33.6kbps between DVR and the Computer. At the ISP(Internet Service Provider) and digital modem, It's max speed is 56kbps. For more information on connection speed, please contact your modem manufacturer directly.

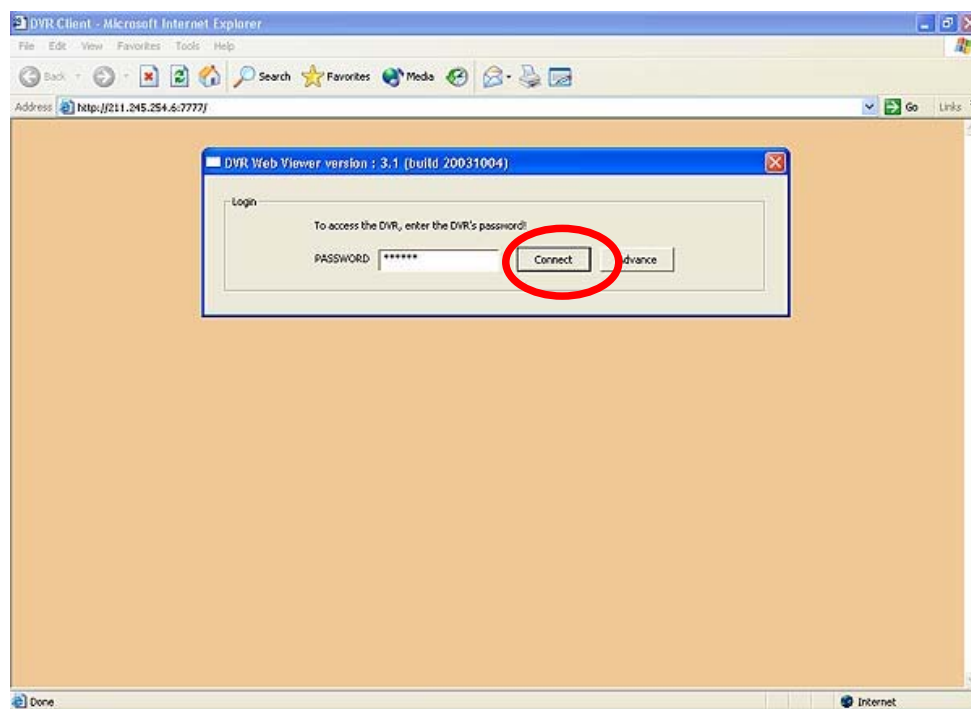
11. Open Internet Explorer (version 6.0 and above), enter 192.168.0.60 in the address bar,

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and then press the Enter Key.



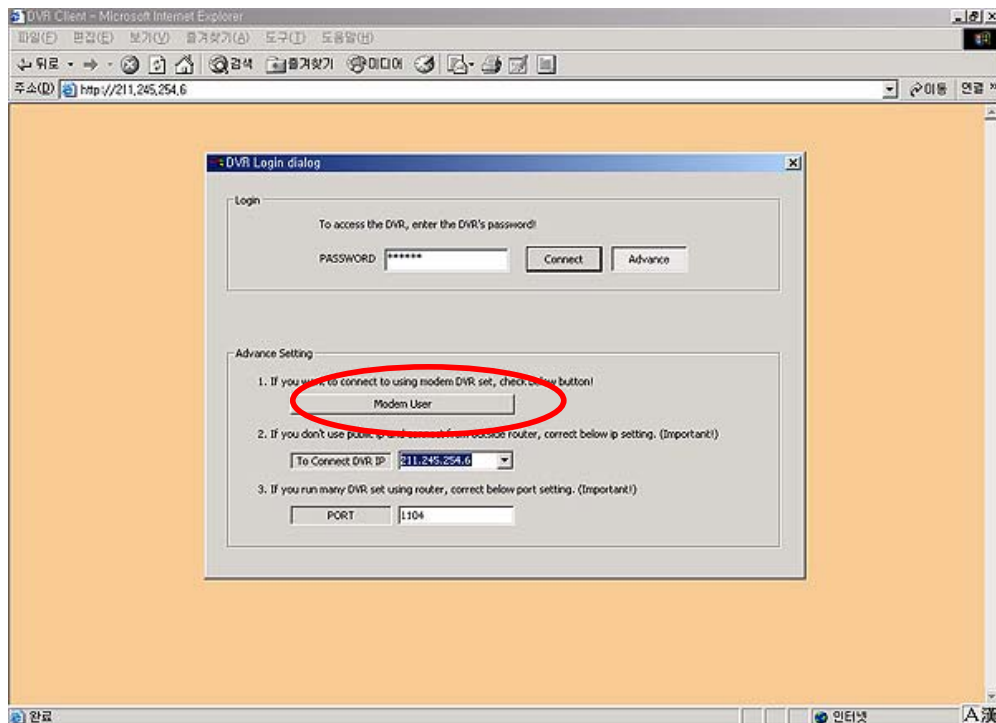
12. You can find DVR Connect Dialogue if the program is installed successfully. And click "Connect" button.



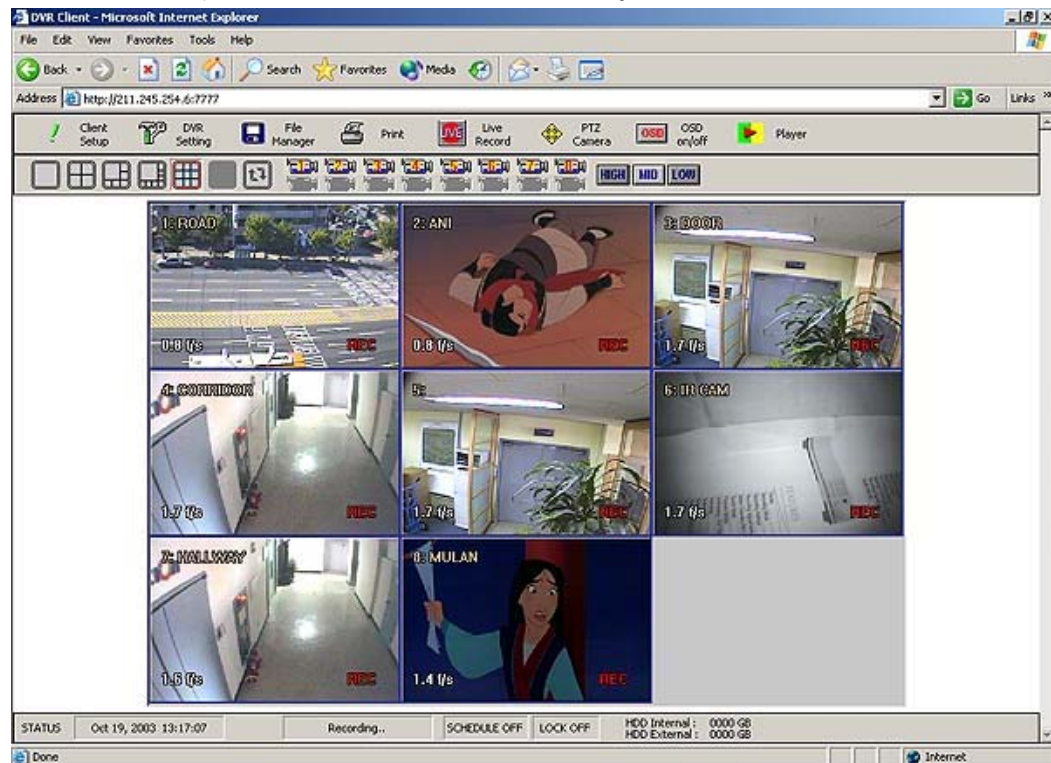
13. Enter the password (Six digits 000000 are initial password), click "Advance", check


---

“Modem user” and click “Connect”.



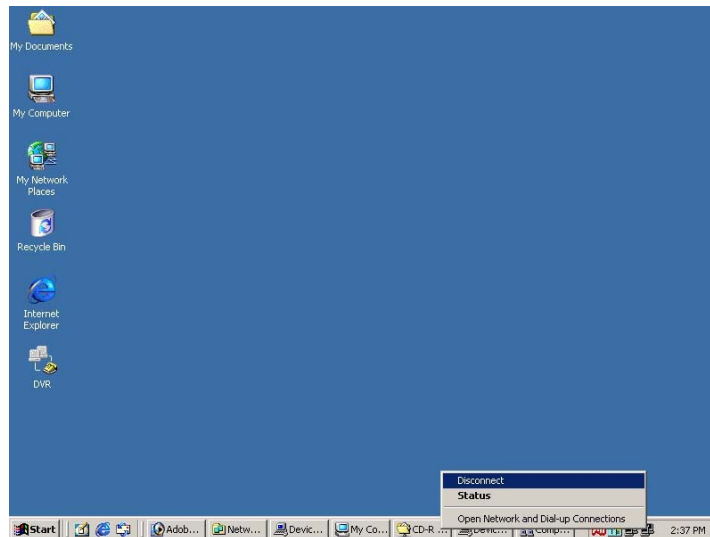
14. You will see the picture if connected successfully.



15. To disconnect modem, place the cursor on the this  icon and right-click and click

---

“Disconnect”



16. To connect modem to the DVR, just double click on the DVR Icon.



# Specification & Contents

## 1. SPECIFICATION

Video Input	4(NTSC/PAL)	8 (NTSC/PAL)	16 (NTSC/PAL)
Video Output	1 Monitor, 1 S-Video		
Loop Out	4	8	None
Live& Playback Display	1,4, PIP	1,4, 6,8,9	1, 4, 6, 8, 9, 13, 16
Compression	WAVELET		
Live Display Resolution	NTSC 720*480, PAL 720*576		
Record & Playback Resolution	NTSC 720*243, PAL 720*288		
Alarm In/Out	4/1	8/1	16/1
Operating System	EMBEDDED LINUX		
System Control	Key buttons & Jog/Shuttle, IR Remote, Remote Client		
Live Display Speed	NTSC 120 fps, PAL 100 fps	NTSC 240 fps, PAL 200 fps	NTSC 480 fps, PAL 400 fps
Maximum Recording Speed	NTSC 60 fps, PAL 50fps		
Recording speed per Channel	15 fps	7 fps	4 fps
Audio Record	1ch (1ch Line In/Out, MIC Input)		
Back Up	Ethernet, Remote PC, External Recording Devices, VCR		
External Recording Devices	HDD, DAT, CD-RW, DVD-RW(-)		
Interface	USB, RS-232, Ethernet		
HDD	80G Default (UPTO 2 INTERNAL HDDS)		
Network	LAN, WAN, Internet, PSTN Line		
Remote Client Software	Plug-In For Internet Explorer 6.0		
IR Remote	Yes		
<b>Features</b>			
Display	Brightness, Contrast, Color Adjustments Per Channel		
Recording Mode	Manual, Schedule, Alarm, Motion		
Recording Method	8 Levels of Compression / Record Frame Rate Adjustment		
Recording Adjustments	Pre-Alarm: 140 frames / Post-Alarm: 20 sec. ~ 240 sec.		
Motion Detection Per Channel	9 Selectable Grids / 15 Sensitivity Levels		
Search Mode	Date& Time, Camera, Alarm / Motion		
Playback Modes	Forward & Reverse: Pause, Frame by Frame, Normal Speed, 2X, 4X, 8X, 16X		
Multi-tasking / Full Triplex	Simultaneous Live Display, Record, Playback, Remote Transmission		
Watchdog	Auto Reboot w/ Maintaining Previous Settings		
System Utility	Password /Auto Lock /Disk Format /Disk Check		

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## 2. Contents

<b>CONTENTS</b>	<b>QUANTITY</b>	<b>REMARK</b>
DIGITAL VIDEO RECORDER	1 UNIT	
CLIENT SOFTWARE CD	1	
REMOTE CONTROLLER	1	
BATTERY (AAAsize)	2	
POWER CORD	1	
USER GUIDE	1	

